

Zimbra

greg.lindy@duneland.k12.in.us

CMS Track

From : Bob Gerometta <bob.gkarch@comcast.net>

Thu, Sep 03, 2015 10:30 AM

Subject : CMS Track**To :** Greg Lindy (E-mail) <greg.lindy@duneland.k12.in.us>**Cc :** Juidth Kelly <Juidth.Kelly@CNA.com>**Reply To :** bob gkarch <bob.gkarch@comcast.net>

Greg:

If you are to be working with McMahon, I think it might be prudent at this point for them to take a measurement wheel or other device to double check the length of the track , "as is". I attached information directly from the 2013 NFHS Track and Field Rules. As I interpret since there is no longer a "Curb", you move in either 8 inches or 12 inches from the inside edge ALL THE WAY AROUND THE track to measure the correct length. Since there is a large sum of money being discussed you should have a "confirmation" of the information given by the striping contractor.(440 yards vs.400 meters)

Bob Gerometta

bob gerometta
g & k architects, inc.
1200n. state rd. 49
chesterton, in, 46304
p 219.926.6655 ext. 105
f 219.929.1123

Greetings, I'm sorry I'm not going to be available for the gathering on Tuesday July 29. I will, however, offer my considerations. Mr. Blosser and Mr. Kearney do understand these items.

First of all, DAC High School teams require ATF timing and with the difference in hurdles, there is little chance this 6 lane track would ever be used by the high school. The 6 lane oval could be used for distance running.

The uniqueness of this facility is 2 fold: we want to continue to use the 8 lanes on the north half or the track for the 200, 100 and 75 hurdles. The markings would be for the start and finish for these races.

Secondly, all other starts and finishes can be common (same start line being the finish line also as is normal on a 400 m track) on the south side near and in front of the bleachers where spectators will be. The list for marking these is basic for the rest of the races run like an arc start for the 1600 and 800. The six lanes would have the normal 1 turn staggers and 2 turn staggers and exchange zones for the 4×4 and 4×1 relays. (personally, I do not see the need for an optional 3 turn stagger on a 6 lane track)

The only non-standard marking we at middle school need is the exchange zone for the 800 relay which is 4×2. (This needs nothing at the start because the #1 runner uses the regular 2 turn stagger but #2 runner needs an exchange zone at the 200 mark. #3 runner and #4 don't run in lanes and cut in)

Thank you for the opportunity for input to this project. I'm sure the new facility will be a source of pride for our community and for our track program.

Sincerely, Roger Sargent, former track coach and IHSAA official

July 25, 2015

Zimbra

greg.lindy@duneland.k12.in.us

RE: c m s track

From : Bob Gerometta <bob.gkarch@comcast.net> Tue, May 26, 2015 11:05 AM
Subject : RE: c m s track
To : 'Greg Lindy' <greg.lindy@duneland.k12.in.us>
Reply To : bob gkarch <bob.gkarch@comcast.net>

Greg:

I recognize many of these names--are they all related to the CMS Track project. ?

Also, I attended a track meet at a Lake Central middle school. They have the same type of bleachers. They also installed a 4 foot or slightly higher chain link fence in from of the bleachers to protect the runners from the sharp edge of the angle supports,

Bob

bob gerometta
g & k architects, inc.
1200n. state rd. 49
chesterton, in, 46304
p 219.926.6655 ext. 105
f 219.929.1123

-----Original Message-----

From: Greg Lindy [mailto:greg.lindy@duneland.k12.in.us]
Sent: Monday, May 25, 2015 12:30 PM
To: Mike Megyesi; Monte Moffett; Dr. David Puis
Cc: Bob Gerometta
Subject: Fwd: c m s track

FYI

Sent from my iPhone

Begin forwarded message:

From: "Roger Sargent" <rogermsargent@comcast.net>
Date: May 25, 2015 at 11:42:16 AM CDT
To: "paul blosser" <pebloss@comcast.net>, <greg.lindy@duneland.k12.in.us>, "Garry Nallenweg" <garry.nallenweg@duneland.k12.in.us>, "Richard Gross" <rich.gross@duneland.k12.in.us>, "David Bullock" <david.bullock@duneland.k12.in.us>, <nick.bamber@duneland.k12.in.us>
Subject: c m s track

Hi guys, Our meeting with Mr. Lindy was very productive. I gave him the list of events middle school runs so these marks can be applied. Basically, we'll have a six lane 400 meter track with all the existing 8 lane segments remaining as they are and entire track marked with standard NFHS markings including a break line for the one turn 800, arcs for the 800 alleys and 3 turn stagger for the 4x4 relay. (potentially a high school meet could be run, except the pole vault) The light poles on south side will be relocated for safety.

The only adjustments for markings we agreed on were moving the common start-finish line on the southeast corner about 10 meters west (off the corner more) to allow spectators see that area better. This allows for the mid exchange zone line (the 200 mark for the 4th runner in the 4x2) on the northwest area to be the same 10 meters east so this can be the common finish for the 75 m hurdles and the 100 dash. The final finish straightaway for the 200 will be marked more clearly to help runners go straight to the finish instead of turning with the track lanes with some dotted guiding marks.

Looks like a good plan. Mr.Lindy will contact Steve Kearney or Roger Sargent when the lines get painted to

help answer any questions that should arise. Gratefully, Roger Sargent

No virus found in this incoming message.

Checked by AVG - www.avg.com

Version: 9.0.935 / Virus Database: 4311.1.1/9337 - Release Date: 05/21/15 20:02:00



952 S. State Road 2
Valparaiso, IN 46385

Telephone: (219) 462-7743
FAX: (219) 464-8248

CHANGE ORDER

(Contractor)
Rieth-Riley Construction Co., Inc.
7500 West 5th Avenue
Gary, Indiana 46406

Contract No. 3641067
Project File No. D0528-5-15-00211.00
Change Order No. TWO (2)
Issue Date: October 30, 2015
Project: Chesterton Middle School Track
Improvements (Phase 2)

You Are Directed To Make The Changes Noted Below In The Subject Contract:

	(Description)	(amount)
2.1	DEDUCT unused contract allowance for incidental work under Phase 1 scope	(\$6,196.00)
	TOTAL - NET DEDUCT	(\$6,196.00)

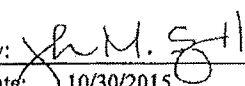
The Changes Result In The Following Adjustments:

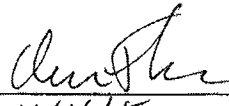
	CONTRACT PRICE	TIME
Original Contract Amount	\$ 217,115.00	N/A days
Previous Adjustments	\$ 12,900.00	N/A days
Prior To This Change Order	\$ 230,015.00	N/A days
Adjustments Per This Change Order	(\$6,196.00)	N/A days
Current Contract Status	\$ 223,819.00	N/A days

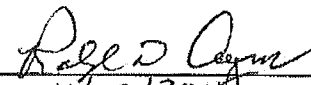
Recommended:
McMAHON
Valparaiso, IN

Accepted:
CONTRACTOR
Rieth-Riley Construction Co., Inc.

Authorized:
OWNER
Duneland School Corporation

By: 
Date: 10/30/2015

By: 
Date: 11/16/15

By: 
Date: 11/02/2015

McMAHON

ENGINEERS ARCHITECTS

952 S. State Road 2
Valparaiso, IN 46385

Telephone: (219) 462-7743
FAX: (219) 464-8248

CHANGE ORDER

(Contractor)

Rieth-Riley Construction Co., Inc.
7500 West 5th Avenue
Gary, Indiana 46406

Contract No.

3641067

Project File No.

D0528-5-15-00211.00

Change Order No.

THREE (3)

Issue Date:

October 30, 2015

Project:

Chesterton Middle School Track
Improvements (Phase 2)

You Are Directed To Make The Changes Noted Below In The Subject Contract:

	(Description)	(amount)
3.1	ADD Furnish and install additional track base, asphalt, and rubber surface complete to make track conform to 400 meter lane dimensions in accordance with IHSA requirements.	\$34,338.97
	TOTAL - NET ADDITION	\$34,338.97

The Changes Result In The Following Adjustments:

	CONTRACT PRICE	TIME
Original Contract Amount	\$ 217,115.00	N/A days
Previous Adjustments	\$ 6,704.00	N/A days
Prior To This Change Order	\$ 223,819.00	N/A days
Adjustments Per This Change Order	\$34,338.97	N/A days
Current Contract Status	\$ 258,157.97	N/A days

Recommended:

McMAHON

Valparaiso, IN

Accepted:

CONTRACTOR

Rieth-Riley Construction Co., Inc.

Authorized:

OWNER

Duneland School Corporation

By:

Date: 10/30/2015

By:

Date: 11/16/15

By:

Date: 11-02-2015

Zimbra

greg.lindy@duneland.k12.in.us

CMS Track Remediation Costs

From : John Sturgill <jmsturgill@mcmgrp-in.com>
Subject : CMS Track Remediation Costs
To : Greg Lindy <greg.lindy@duneland.k12.in.us>

Tue, Aug 23, 2016 04:02 PM

5 attachments

Greg:

As requested, here are the final costs for the track repair / re-work at CMS last year:

Rieth-Riley - \$34,338.97
McMAHON - \$3,690.05

We also prepared an as-constructed plan of the track and striping at the request of Midwest Track. We never received payment from them. Since it may be beneficial to the School Corp going forward, I would like to see if we could recover our effort in the development of this plan in addition to the above claims. The total cost of the survey was \$900. I can send you the plan and original agreement with Midwest Track if you require. I suspect they would have just marked up our cost and billed you for it as a part of their T&M claim. I think they forgot to include this cost in the final payment claim with Rieth Riley. Let me know.

With the as-constructed survey included, DSC's total exposure would be \$38,929.02

John M. Sturgill

VICE PRESIDENT

McMAHON
ENGINEERS ARCHITECTS*The McMAHON Way... Values. Culture. Relationships.*

952 SOUTH STATE ROAD #2 VALPARAISO, IN 46385
219-462-7743 MCMGRP.COM



image001.png
15 KB



image002.png
16 KB



image003.png
3 KB



image004.png
2 KB

GEROMETTA & KINEL ARCHITECTS, INC.
INVOICE FOR ARCHITECTURAL SERVICES

PROJECT:
(Name,
address)

Running Track Renovation
Chesterton Middle School
Chesterton, IN

DATE:

9-4-15

INVOICE NO:

1506-Two

TO:

Duneland School Corp.
c/o Mr. Greg Lindy
601 Morgan Ave.
Chesterton, IN 46304

ARCHITECTS
PROJECT NO:

1506

In accordance with the Owner-Architect Agreement dated **March 30, 2015** there is due at this time for Architectural services and reimbursable items on the above project for the period ending **September 2, 2015**
The sum of **One Thousand, Six Hundred and Twenty-Eight and 36/100 Dollars (\$1,628.36)**

The above amount shall become due and payable **30** days from the date hereof.

INTEREST ON OVERDUE ACCOUNTS SHALL ACCRUE AT

PERCENT () PER

This invoice is for services during the "Construction Phase" of work. That amount is 20% of our fee based on $5\% \times \text{Construction Cost} = .05 \times \$217,115.00 = \$10,855.75$, and $20\% \times \$10,855.75 = \$2,171.15$.

At this point all that was left was the "Striping" and final inspection, so we are invoicing for 75% of that

Therefore:

$\$2,171.15 \times .75$ ----- **\$1,628.36**

Thank You,

Note: Total invoiced to date = \$10,388.72

ARCHITECT:

Gerometta & Kinel Architects Inc.

BY:

R.M. Gerometta

ADDRESS:

1200 N. State Rd. 49, Chesterton, IN 46304

Zimbra

greg.lindy@duneland.k12.in.us

CMS Track Remediation Costs

From : John Sturgill <jmsturgill@mcmgrp-in.com>
Subject : CMS Track Remediation Costs
To : Greg Lindy <greg.lindy@duneland.k12.in.us>

Tue, Aug 23, 2016 04:02 PM

5 attachments

Greg:

As requested, here are the final costs for the track repair / re-work at CMS last year:

Rieth-Riley - \$34,338.97
McMAHON - \$3,690.05

We also prepared an as-constructed plan of the track and striping at the request of Midwest Track. We never received payment from them. Since it may be beneficial to the School Corp going forward, I would like to see if we could recover our effort in the development of this plan in addition to the above claims. The total cost of the survey was \$900. I can send you the plan and original agreement with Midwest Track if you require. I suspect they would have just marked up our cost and billed you for it as a part of their T&M claim. I think they forgot to include this cost in the final payment claim with Rieth Riley. Let me know.

With the as-constructed survey included, DSC's total exposure would be \$38,929.02

John M. Sturgill

VICE PRESIDENT

McMAHON

ENGINEERS ARCHITECTS

The McMAHON Way... *Values. Culture. Relationships.*

952 SOUTH STATE ROAD #2 VALPARAISO, IN 46385
219-462-7743 MCMGRP.COM

**McMAHON**

ENGINEERS ARCHITECTS

image001.png
15 KB**image002.png**
16 KB**image003.png**
3 KB**image004.png**
2 KB

PROJECT MANUAL FOR:

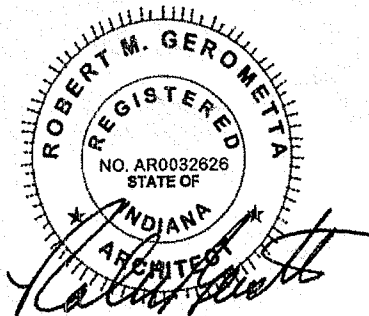
CHESTERTON MIDDLE SCHOOL
RUNNING TRACK RECONSTRUCTION
651 MORGAN AVENUE
CHESTERTON, INDIANA

OWNER:

DUNELAND SCHOOL CORPORATION
601 Morgan Ave.
Chesterton, Indiana 46304
219-983-3600

ARCHITECT:

GEROMETTA & KINEL ARCHITECTS, INC.
1200 N. State Road 49
Chesterton, IN 46304
David J. Kinel, Architect
(219) 926-6655



Robert M. Gerometta
R.A. #AR-0032626

April 24, 2015

RUNNING TRACK RECONSTRUCTION

Chesterton Middle School

Chesterton, Indiana

PROJECT MANUAL INDEX***PART I - CONTRACTUAL - LEGAL REQUIREMENTS***

<u>SECTION</u>	<u>PAGES</u>	<u>DESCRIPTION</u>
0100	2	Notice to Bidders
0110	5	Instructions for Bidders
0130	1	Bid Forms
0135	1	E-Verify Form
0140	-	Bid Bond (AIA A310) (incl. by reference)
0160	1	Material & Subcontractors List
0200	1	Owner-Contractor Agreement(AIA A101) & Performance Bond & Labor & Materials Bond (AIA A311)Agreement
0300	1	General Conditions (AIA A201)
0310	5	Supplementary Conditions
0320	8	Wage Rates
0400	1	Cash Allowances

PART II - TECHNICAL SPECIFICATIONS**DIVISION 1**

		<u>GENERAL</u>
1010	3	Summary of Work
1050	2	Schedule of Values
1100	2	Alternates
1300	2	Submittals
1400	1	Cleaning-up
1500	2	Temporary Facilities
1700	1	Project Close-out

DIVISION 2

		<u>SITEWORK</u>
2000	16	Geotechnical Report
2100	2	Site Preparation
2500	5	Asphaltic Concrete Surfacing
2540	6	Synthetic Surfacing/Striping
2860	2	Equipment & Structures
2930	3	Lawns & Grasses

DIVISION 3

		<u>CONCRETE</u>
3000	4	Concrete Formwork/Reinforcement/Cast-In-Place

DIVISION 4-16**--NOT USED --****--END--**

SECTION 0100
NOTICE TO BIDDERS

Notice is hereby given that Duneland School Corp. is soliciting sealed bids at their Administration Center, 601 Morgan Ave., Chesterton, Indiana for Running Track Reconstruction at Chesterton Middle School. The project is located at 651 Morgan Avenue, Chesterton, Indiana.

Bids shall be sent to or hand delivered to the Administration Center, 601 W. Morgan Ave., Chesterton, IN 46304 c/o Dr. David Pruis, Superintendent, and received by 11:00 a.m. local time on Wednesday, May 6, 2015 at which time bids will be publicly opened and read aloud.

Bids received after such time will be returned unopened. Bids may be withdrawn prior to such time, but no bids, including Alternate Bids shall be withdrawn for a period of sixty (60) days thereafter. The Owner reserves the right to reject any and/or all Bids and to waive any informalities in the bidding. Conditional Bids will not be accepted.

A single "Lump Sum" Bid is solicited for all work on this project.

Bids shall be properly executed, submitted on a current State Board of Accounts Form 96, including financial data as recent as possible, a non-collusion Affidavit, Alternate Bids, and any other documents required by the "Instructions for Bidders", Spec. Section 0110.

A Bid Security in the amount of five percent (5%) of the total bid, payable to "Duneland School Corporation", shall accompany the Bid in accordance with "Instructions for Bidders", to guarantee the successful Bidder will enter into contract with the School Corporation according to the terms of the Contract Documents, including furnishing of a satisfactory "Performance Bond" the amount of 100% of Contract. Bidder shall file either a Bid Bond or a certified check with his Bid.

All work shall be done in accordance with Contract Documents prepared for this Project and work shall be completed within time period as provided in Supplementary Conditions, Spec. Section 0310.

The track will be available to the successful Bidder after June 14, 2015.

Drawings and Specifications will be available and on file and may be examined by prospective Bidders at the following locations or on the online Plan Room at 'gkplanroom.com' after April 23, 2015.

1. Office of the Architect:

Gerometta & Kinel Architects, Inc.
1200 N. State Rd. 49
Chesterton, IN 46304
219-926-6655
Email: bob.gkarch@comcast.net

2. Office of the Owner:

c/o Mr. Greg Lindy
Duneland School Corp.
601 Morgan Avenue
Chesterton, IN 46304
219-983-3600

3. Architect's Online Plan Room:

www.gkplanroom.com

All Prime Bidders will be required to have at least one complete set of Project Drawings and Project Specifications Manual. The total deposit for each set of Project Drawings and Specifications Manual in the form of a check payable to the Duneland School Corporation will be One-Hundred dollars (\$100.00) per set on a 100% refundable basis if returned in useable condition within thirty (30) days after opening of Bids.

Interested Subcontractors and Material Suppliers should obtain Bid Documents from Prime Bidders, or should arrange to view Drawings and Specifications at the locations listed previously above.

There will be a Project Pre-Bid Meeting, at 1:00 p.m. local time on Wednesday, April 29, 2015 at the Project site. Meet at the bleachers.

Dated: _____

Duneland School Corporation

SECTION 0110
INSTRUCTIONS FOR BIDDERS

1.01 **DEFINITIONS**

- A. All definitions set forth in the General Conditions are applicable to these instructions for Bidders.
- B. Bidding Documents include the Notice to Bidders, Instructions for Bidders, the Bid Forms, and the proposed Contract Documents including any Addenda issued prior to receipt of Bids.

1.02 **BIDDER'S REPRESENTATION**

- A. Each Bidder by making his bid represents that:
 - 1. He has read and thoroughly reviewed all divisions of the Project Manual, all Drawings, and all other Contract Documents; Local, State, and Federal Laws and Ordinances; and all other matters which can, in any way affect the work under this Contract.
 - 2. He has personally visited the site of the proposed Project and thoroughly familiarized himself as to the nature and location of the project and existing conditions.
 - 3. He has the equipment, technical ability, personnel, and facilities to construct the project in accordance with the Contract Documents and Required Completion Date.
 - 4. He has examined the Contract Documents and has found them sufficiently complete to enable him to prepare a sound bid.
 - 5. He has investigated and complied with local laws that pertain to the licensing of contractors.
 - 6. His Bid is based upon the materials, systems, and equipment described in the Bidding Documents without exceptions.
- B. **Bidders will not be given extra payments for conditions, which can be determined by examining the site and Contract Documents.**

1.03 **INTERPRETATIONS**

- A. No oral interpretation will be made to any Bidder as to the meaning of the Drawings, Project Manual, or other Contract Documents. Every request for such interpretation shall be made in writing to the Architect. Any inquiry shall be received at least five working days prior to the date fixed for opening of Bids will be given consideration. Every interpretation made to a Bidder will be in the form of an Addendum to the Project Manual, which if issued, will be on file in the office of the Owner and the Architect at least three (3) working days before bids are opened. In addition, Addenda will be emailed to each Bidder of Record, but it shall be the Bidder's responsibility to make inquiry as to Addenda issued. All Bidders shall be bound by such Addenda,

whether or not received by the Bidder. The Owner will not be responsible for any other explanation or interpretation of the Contract Documents.

- B. No verbal agreement, understanding or conversations with any agent or employee of the Owner, either before or after the execution of this Contract, shall affect or modify any of the terms of obligations herein contained.

1.04 SUBSTITUTIONS

- A. The naming of products and/or materials is done for the express purpose of establishing a basis of durability, efficiency, appearance and simplification of maintenance and not for the purpose of limiting competition. Other manufacturer's materials or articles may be used providing the material or article is presented as specified and approved by the Architect and the Owner.
- B. Each Bidder represents that his Bid is based upon the materials and equipment described in the Bidding Documents.
- C. During the bidding phase, no substitution will be considered unless written request has been received by the Architect five working days prior to bid opening.
- D. If the Architect approves any proposed substitutions such approval will be set forth in an Addendum, or in an approval letter.
- E. Voluntary Alternatives: may be submitted with Bid, but will NOT affect bid award. Only AFTER a Bidder is awarded Contract will his voluntary alternate be considered.

1.05 BASIS OF BIDS

- A. The naming of products and/or materials is done for the express Purpose of establishing a basis of durability, efficiency, appearance and all other items shown on the Bid forms; failure to comply may be cause for rejection.
- B. **A Single "LUMP SUM" Bid is solicited for all work on this project as specified in Specification Section 0100, Notice to Bidders:**

1.06 BIDS

- A. Bids shall be made in accordance with the following instructions:
- B. Bids shall be complete and properly executed, including each and every item; bids shall be stated in writing and in figures. Erasures, interlineations or alterations of Bid Form will not be permitted.
- C. Submit Bid Form in duplicate, all copies signed. Type name under each signature. The signature of all persons shall be in longhand.

If a Bid is submitted by an individual, such Bid shall be signed by the person making such bid or the Bid shall have attached thereto a power-of-attorney evidencing authority to sign the Bid in the name of the person for whom it is signed.

If a Bid is submitted by a partnership, said Bid shall be signed by all of the partners or by an attorney-in-fact.

If a Bid is submitted by a Corporation, said Bid shall be signed by the correct corporate name thereof, and the signature of the president, or other authorized officer manually written below the corporate name, and the attesting signature of the secretary of the corporation and impression of the corporate seal.

- D. No oral, telegraphic, telephonic, or electronic bids or modifications will be considered. Alternative Bids will not be considered unless called for in the Project Manual.
- E. Submit Bid, Bid Security and other required documents in an opaque, sealed envelope. Identify the envelope with: 1. Project Name; 2. Name of Bidder, and 3. Division of Work.
- F. A Bid is invalid if it has not been deposited at the designated location prior to the time and date for receipt of bids indicated in the Notice to Bidders or prior to any extension thereof issued to the Bidders.
- G. No Bidder may modify, withdraw, or cancel his bid or any part thereof for sixty (60) days after the time designated for the receipt of bids.
- H. Bids may be withdrawn on written or telegraphic request dispatched by the Bidder in time for delivery in the normal course of business prior to the time fixed for opening.

1.07 BID SECURITY

- A. The Bid shall be accompanied by a Bid Security which shall not be less than five percent (5%) of the amount of the bid, as explained in the Notice to Bidders.
- B. Within ten (10) days after the opening of Bids, the Bid Securities will be returned to all Bidders except the three lowest Bidders. The remaining Bid Securities will be returned within 48 hours after the Owner and the accepted Bidders have executed the Contracts and Performance Bond and Labor and Payment Bond have been approved by the Owner. If the required Contract has not been executed within sixty (60) days after the date of the opening of Bids, the Bid Security of the three lowest Bidders will be returned upon their request, provided they have not been notified of the acceptance of their bids prior to the date of such request.

1.08 CONTRACT SECURITY

A. The successful Bidders shall furnish a Performance Bond in an amount equal to one hundred percent (100%) of the Contract Sum as security for the faithful performance of the Contract and also a Labor and Material Payment Bond in an amount not less than one hundred percent (100%) of the Contract Sum as security for the payment of all persons performing labor on the Project under this Contract and furnishing materials in connection with this Contract. The Performance Bond and the Labor and Material Payment Bond shall be submitted on AIA Form A312 and shall be delivered to the Owner not later than seventy-two (72) hours after "Notice of Award" to Contractor is given by the Owner. The Surety Company must be listed in Treasury Department Circular 570 and be authorized to do business in the State of Indiana.

1.09 TIME

A. Bidder agrees to commence physical "On-Site" construction, after June 14, 2015 and complete work no later than August 21, 2015.

1.10 OPENING OF BIDS

The Bids will be opened as announced in the Notice to Bidders.

1.11 SUBMISSION OF POST-BID INFORMATION

A. Materials and Subcontractor's List Form: On this Form, each of the three (3) low Bidders on each Bid shall list all subcontractors that he proposes to use if awarded the Contract. Three (3) copies of this form must be submitted within seven (7) days of the opening of Bids in order to qualify for the award of the Contract. Each Bidder to whom a Contract is awarded shall submit three (3) copies of above form, within 14 days of the award of the Contract, listing all materials and materialmen that he proposes to use on the Project. If the Owner or Architect has a reasonable and substantial objection to any person or organization on such a list and refuses in writing to accept such person or organization, the Bidder may, at his option, withdraw his bid without forfeiture of bid security, notwithstanding anything to the contrary contained in Paragraph 1.05. If the Bidder submits an acceptable substitute with an increase in his bid price to cover the difference in cost occasioned by such substitution, the Owner may, at his discretion, accept the increased bid price or he may disqualify the Bidder. Subcontractors, other persons, and organizations proposed by the Bidder and accepted by the owner and Architect shall be used on the work for which they were proposed and accepted and shall not be changed except with the written approval of the Owner and Architect.

Schedule of Values - See Section 1050, Schedule of Values

1.12 AWARD OF CONTRACTS

A. It is the intention of the Owner to enter into Contract with the lowest responsible Bidder whose construction skills and financial resources are fully

equal to the task of prosecuting the work in rapid and satisfactory manner, bringing it to the successful completion within the time limit.

- B. Bids for this Contract will be compared by the aggregate lump sum of all extensions or the lump sum amount for the entire work. If, however, in the opinion of the Owner, it becomes advisable to accept any of the alternative items, the deduction or addition of the alternative item or items, will then be applied to the lump sum amount and a comparison made on this amount.
- C. The Contract shall be deemed to have been awarded when a Notice of Award shall have been duly served upon the Bidder to whom the Owner contemplates awarding the Contract, by any Officer or Agent of the Owner duly authorized to give such notice.
- D. Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the Owner and Architect the required copies of the specified contract, contract security, and other required documents.

1.13 RETAINAGE

The Owner will retain, until Final Payment, ten percent (10%) of amount due the Contractor on account of Progress Payments. (For further explanation, see General Conditions and Supplementary Conditions.)

1.14 WAGE RATES

A schedule of minimum rates for each craft or classification of all workmen needed to perform this Contract during the anticipated term is included under Section 0320.

1.15 DEPOSIT RETURN

Refundable Deposits will be returned to Bidder if reusable prints and Project Manuals are received at the Architect's office within thirty (30) days after the bid opening. If prints and Project Manuals cannot be reused, the Bidder will be charged for the replacement of these sets.

1.16 TAX EXEMPTION

This Project is exempt from Indiana State Sales Tax on materials incorporated into Project.

1.17 CASH ALLOWANCES

See Specification Section 0400. Include all "Cash Allowances" with Base Bid..

1.18 **Bidders shall include with their bid, "EVerify Provisions for Contracts", in Spec. Section 0135.**

- END -

SECTION 0130
BID FORMS

1.01 FORMS

- A. GENERAL BID FOR PUBLIC WORK, prescribed by the State Board of Accounts, General Form No. 96 (Revised 2000), CONTRACTOR'S BID.
- B. OMIT –
- C. Obtain No. 96 and 96a Forms from the State Board of Accounts, Indianapolis, Indiana, or off ice supply stores.
- D. *A Single "Lump Sum" Bid* is solicited for all work on all *Contracts* as described in Spec. Section 0100. Instructions for Bidders.
- E. Bids shall include all CASH ALLOWANCES specified in the Project Manual, Section 0400. INCLUDE IN BASE BID!
- F. Forms issued to Prime Contractors only.
- G. Submit specified number of copies of No. 96, Recent Financial Data, and Section 0130 BID FORMS.
- H. Modify No. 96 as follows:
 - 1. Delete Unit Prices reference paragraph and unit prices and add:

<u>DESCRIPTION OF WORK</u>	<u>UNIT</u>	<u>UNIT PRICES</u>	
		<u>ADD</u>	<u>DEDUCT</u>
Structural Backfill (in place) (Compacted Stone)	cu.ft.	\$ _____	\$ _____
Machine Excavation	cu.yd.	\$ _____	\$ _____
Asphalt Paving 1" HAC Surface over existing asphalt surface	sq.yd.	\$ _____	\$ _____

1.02 ALTERNATE BIDS:

Include ALL Alternates that are specified in SECTION 1100 for the appropriate portion of the Work, and include this form with the State Form 96. "ADD" or "DEDUCT" as appropriate.

ALTERNATE #:

GC-1: ADD \$ _____

GC-2: ADD \$ _____

GC-3: ADD \$ _____ or DEDUCT \$ _____

Manufacturer's Name and Product _____

- END -

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

1924

SECTION 0135

E-VERIFY PROVISIONS FOR CONTRACTS:

E-Verify Compliance: Pursuant to I.C. 22-5-1.7, Contractor shall enroll in and verify the work eligibility status of all newly hired employees of Contractor through the E-Verify Program (Program). Contractor is not required to verify the work eligibility status of all newly hired employees through the Program if the Program no longer exists. Also pursuant to I.C. 22-5-1.7, Contractor must execute an affidavit affirming that the Contractor does not knowingly employ an unauthorized alien *and confirming Contractor's enrollment in the Program, unless the Program no longer exists*, shall be filed with the School Corporation prior to the execution of this contract. This contract shall not be deemed fully executed until such affidavit is delivered to the School Corporation.

Contractor and its subcontractors shall not knowingly employ or contract with an unauthorized alien or retain an employee or contract with a person that contractor or its subcontractor subsequently learns is an unauthorized alien. If Contractor violates this provision School Corporation shall require Contractor to remedy the violation not later than thirty (30) days after School Corporation notifies Contractor. If Contractor fails to remedy the violation within the thirty (30) day period, School Corporation shall terminate the contract for breach of contract. If School Corporation terminates the contract, Contractor shall be liable to School Corporation for actual damages in addition to any other contractual remedies. There is a rebuttable presumption that Contractor did not knowingly employ an unauthorized alien if Contractor verified the work eligibility status of the employee through the Program.

Prior to performing any work, Contractor shall require each subcontractor to certify to Contractor that the subcontractor does not knowingly employ or contract with an unauthorized alien and has enrolled in the Program. Contractor shall maintain on file a certification from each subcontractor throughout the duration of this contract or project which is the subject of this contract. If Contractor determines that a subcontractor is in violation of this provision, Contractor may terminate its contract with the subcontractor for such violation.

Duneland School Corporation Contractor Affidavit:

The undersigned being duly sworn upon *(his)/(her)* oath, now says that I, [Please print/type]

(Name and title) _____ at

or with *(Business entity name)* _____, do hereby state that

(Business entity name) _____ does not knowingly employ unauthorized aliens/immigrants and participates in the E-Verify Program when it hires new employees to confirm their work eligibility.

Date _____

I swear or affirm, under the penalties for perjury, that the foregoing statements are true.

Signature of affiant and title *(include name of business entity if different from above)*

1.01 GENERAL

- | 2.01 | <u>ITEM</u> | <u>SUBCONTRACTOR</u> | <u>MATERIAL OR SUPPLIER</u> |
|------|-------------|----------------------|-----------------------------|
|------|-------------|----------------------|-----------------------------|

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

SECTION 0200
AGREEMENT

1.01 GENERAL

- A. Contract Form - The Agreement shall be the 2007 Edition of A.I.A. Document A-101, issued by the American Institute of Architects, entitled "Standard Form of Agreement Between Owner and Contractor Where the Basis of Payment is a Stipulated Sum."
- B. Performance and Payment Bond - Bond Forms may be Surety Companies' Standard Forms, similar to AIA Form A-312, Performance Bond and Labor and Material Payment Bond (Latest Edition). Bonding Company shall not be released from its obligations until one year after acceptance of Project by Owner. (Substantial Completion).

- END -

SECTION 0300
GENERAL CONDITIONS

The General Conditions shall be the Fourteenth Edition of AIA Document A-201, issued by the American Institute of Architects, 2007, entitled "General Conditions of the Contract for Construction", is included by reference and becomes a part of the Project Manual.

- END -

SECTION 0310
SUPPLEMENTARY CONDITIONS

1.01 **GENERAL CONDITIONS**

The "General Conditions of the Contract for Construction" AIA Document A201, Sixteenth Edition, 2007, Articles 1 through 15 inclusive, is a part of this Contract, and is incorporated herein as fully as if here set-forth.

1.01 **SUPPLEMENTS**

The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction", AIA Document A201, Sixteenth Edition, 2007. Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these supplements, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

ARTICLE 1 CONTRACT DOCUMENTS

ADD THE FOLLOWING PARAGRAPH AND SUBPARAGRAPHS:

1.1.8 **MISCELLANEOUS DEFINITIONS**

1.1.8.1 The term "provide" shall mean: Furnish, install and pay for.

1.1.8.2 When the words "approved", or "approved equal", "satisfactory", "as directed", or other words of similar character are used, "by the Architect" is also to be understood.

1.2.3 **ADD THE FOLLOWING SUBPARAGRAPH:**

1.2.3.1 Should there be conflicts between Drawings and Project Manual or among the several other documents, Contractor shall provide the greater quantity or higher quality.

ARTICLE 2 OWNER

ADD NEW PARAGRAPH 2.5

2.5 **OWNER'S RIGHT TO PARTIAL OCCUPANCY**

2.5.1 The right to occupy any individual completed building or premises at any time prior to completion of the Contract is reserved by the Owner. Such occupancy shall not commence prior to a time mutually acceptable by the Owner, Contractor, and Architect.

ARTICLE 4.1 ARCHITECT

ADD NEW SUBPARAGRAPH 4.1.5

- 4.1.5 The Architectural services to be provided pursuant to the Owner/Architect Contract are being performed solely for the benefit of the Owner, and no benefit is meant to be conferred upon any person or entity not a party to this agreement, and no such person or entity should rely upon this Architect's performance or those services to the Owner; and no claim against the Architect shall accrue to, any Contractor, Subcontractor, Consultant, Engineer, Supplier, Fabricator, Manufacturer, Tenant, Surety, or any third party as a result of this Agreement, or the performance or nonperformance of Architectural Services on this Project. The Owner agrees that the provisions of this paragraph shall appear in the General Conditions of the Contract Documents.

ARTICLE 7 CHANGES IN THE WORK

7.1.3 ADD NEW SUBPARAGRAPHS AS FOLLOWS:

- 7.1.3.1 When "Additional Work is requested by the Owner that is not covered in the Drawings or Specifications, said work shall be added to the Contract by means of a written "Change Order" approved by the Owner. Payment for said Change Order will be as follows:

Labor: Payroll cost plus benefits, plus 25% x same for all other pro-rated bond, insurance, taxes, etc. plus 15% added for overhead and profit.

Materials: Material and or Subcontractor invoice cost of same plus 15% added for overhead and profit.

The above applies for all "extra" work agreed upon by the Architect and Owner and NOT paid from "Credits" or "Cash Allowances".

- 7.1.3.2 In the second sentence, change the words: "a reasonable allowance for overhead and profit", to read: "an allowance for overhead and profit in accordance with Subparagraph 7.1.3.1"

ARTICLE 8 TIME

ADD SUBPARAGRAPH 8.1.5, AS SET FORTH BELOW:

- 8.1.5 The term *reasonable time* is defined as ten calendar days.

ARTICLE 9 PAYMENTS AND COMPLETION

ADD NEW SUBPARAGRAPH 9.2.1.1, AS SET FORTH BELOW:

- 9.2.1.1 Refer to Specifications Section 01050, SCHEDULE OF VALUES, for provisions on this subject.

ADD NEW SUBPARAGRAPHS TO PARAGRAPH 9.3, APPLICATIONS FOR PAYMENT:

- 9.3.1.3 Submit Application for Payment on forms acceptable to Owner & Architect.
- 9.3.1.4 The Owner will retain, until final payment and audit, ten percent (10%) of the amount due the Contractor on account of progress payments. An "ESCROW ACCOUNT" for all retained money will be established for the General Contractor.
- 9.3.3.1 All material and work covered by partial payments made shall become the sole property of the Owner, but this provision shall not relieve the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require fulfillment of all the terms of the Contract.

ARTICLE 11 INSURANCE

ADD THE FOLLOWING INFORMATION TO RESPECTIVE PARAGRAPHS, AS FOLLOWS:

- 11.1.1 Liability insurance shall include all major divisions of coverage and be on a comprehensive basis including Broad Form Comprehensive Liability Endorsement plus:
1. Owner's and Contractor's Protective
 2. Products and Completed Operations
 3. Contractual - including specified provision for the Contractor's obligations under Paragraph 3.18
 4. Owned, non-owned and hired motor vehicles.
 5. Premises-Operation (including X-C-U).
- 11.1.2 ADD THE FOLLOWING:
1. Workmen's Compensation -Statutory - Employer's Liability:
\$1,000,000/\$1,000,000/\$1,000,000.
 2. Public Liability/Compensation-Statutory-Employer's Liability:
 - a. General Aggregate (other than products and completed operation) \$1,000,000

- | | |
|--|-------------|
| b. Products and Completed Operations Aggregate | \$1,000,000 |
| c. Personal and Advertising Injury | \$1,000,000 |
| d. Each Occurrence Limit | \$1,000,000 |
| e. Fire Damage Limit | \$ 300,000 |
3. Automobile Liability - \$1,000,000 Per Occurrence
 4. Independent Contractors - Same limits as above.
 5. Products and Completed Operations - Same limits as above for two years, commencing with issuance of final Certificate for Payment.
 6. Contractual Liability - Same limits as above.
 7. Excess Liability Umbrella: BI & PD: (MINIMUM) \$4,000,000/
\$4,000,000.
 8. Automatic and General Liability policies must be primary non-contributory, and include a waiver of subrogation in favor of Owner.

11.1.3 ADD NEW SUBPARAGRAPH:

- 11.1.3.1 Furnish two copies of certificates herein required of each copy of agreement. Specifically set forth evidence of all coverage required by 11.1.1 and 11.1.2. The form of certificate shall be AIA Document G705. Furnish to the Owner copies of any endorsements that are subsequently issued amending coverage or limits. THE CERTIFICATE MUST STATE THAT IN THE EVENT OF CANCELLATION OF SUCH POLICIES, THE INSURANCE COMPANY MUST GIVE THIRTY (30) DAYS WRITTEN NOTICE OF SAID CANCELLATION TO THE DUNELAND SCHOOL CORP.

ADD NEW SUBPARAGRAPH:

- 11.3.1.1 Owner's Property Insurance does NOT include interests of Contractors & subcontractors. Therefore, Contractors & Subcontractors shall insure their own property with an "INSTALLATION FLOATER". Cost of this insurance shall be borne by contractor as part of his Base Bid.

ADD THE FOLLOWING NEW SENTENCE TO PARAGRAPH 11.3.11:

- 11.3.11 The insurance shall not be canceled or lapsed on account of such partial occupancy.

ARTICLE 13 MISC. PROVISIONS

ADD NEW SUBPARAGRAPH 13.5.7 AS SET FORTH BELOW:

13.5.7 Inspection or Testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

ARTICLE 15 EQUAL OPPORTUNITY

15.1 POLICIES OF EMPLOYMENT

The Contractor shall maintain policies of employment as follows:

15.1.1 The Contractor and all Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, color, sex, or national origin. Such action shall include, but not be limited to the following: employment, up grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination rates or pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees, and applicants for employment, notices setting forth the policies of non-discrimination.

15.1.2 The Contractor and all Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex, or national origin.

- END -

The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in all financial dealings.

It is further stated that the records should be kept up-to-date and accessible at all times. This will ensure that any discrepancies or errors can be identified and corrected promptly.

The second part of the document outlines the specific procedures for recording transactions. It details the steps to be followed from the initial entry to the final review and approval.

It is also noted that the records should be maintained in a secure and confidential manner. Only authorized personnel should have access to the information.

The third part of the document discusses the importance of regular audits and reviews. It states that these checks are essential for ensuring the accuracy and integrity of the records.

It is further emphasized that the results of the audits should be used to identify areas for improvement and to implement corrective actions where necessary.

The fourth part of the document outlines the responsibilities of the various departments involved in the record-keeping process. It clarifies the roles and duties of each team.

It is also noted that the records should be kept for a minimum of five years. This will ensure that all relevant information is available for future reference.

The fifth part of the document discusses the importance of training and education for all staff involved. It states that regular training sessions should be conducted to ensure that everyone is up-to-date on the latest procedures and best practices.

It is further emphasized that the records should be kept in a clear and concise manner. All entries should be legible and easy to understand.

The sixth part of the document outlines the importance of maintaining a good working relationship with external auditors. It states that open communication and cooperation are essential for a successful audit process.

It is also noted that the records should be kept in a secure and confidential manner. Only authorized personnel should have access to the information.

The seventh part of the document discusses the importance of regular updates and revisions to the record-keeping procedures. It states that these changes are necessary to ensure that the system remains effective and efficient.

It is further emphasized that the records should be kept in a secure and confidential manner. Only authorized personnel should have access to the information.

The eighth part of the document outlines the importance of maintaining a good working relationship with external auditors. It states that open communication and cooperation are essential for a successful audit process.

It is also noted that the records should be kept in a secure and confidential manner. Only authorized personnel should have access to the information.

The ninth part of the document discusses the importance of regular updates and revisions to the record-keeping procedures. It states that these changes are necessary to ensure that the system remains effective and efficient.

It is further emphasized that the records should be kept in a secure and confidential manner. Only authorized personnel should have access to the information.

SECTION 0320
WAGE SCALE

1.01 GENERAL

- A. As required by Section 53-301 Burns Indiana Statutes 1951 Replacement, a minimum wage scale has been established for this Project and any bids submitted must be based on the minimum wage scale, bound in this Section.
- B. The Contractor shall comply with the wage requirements as set forth by the Committee, appointed pursuant to Chapter 319, Acts of 1935, State of Indiana. Wage rates set forth by the Committee are the minimum and shall not prevent the Contractor or Subcontractor from paying a higher rate of wage. Prevailing rate for all classifications of labor will be considered minimum.

Boilermakers	<i>Skilled</i>	\$33.78	\$25.88	\$59.66
	<i>Semiskilled</i>	\$27.02	\$25.88	\$52.90
	<i>Unskilled</i>	\$20.27	\$25.88	\$46.15
Bricklayers	<i>Skilled</i>	\$36.12	\$21.07	\$57.19
	<i>Semiskilled</i>	\$27.09	\$21.07	\$48.16
	<i>Unskilled</i>	\$18.06	\$21.07	\$39.13
Stone Masons	<i>Skilled</i>	\$36.12	\$21.07	\$57.19
	<i>Semiskilled</i>	\$27.09	\$21.07	\$48.16
	<i>Unskilled</i>	\$18.06	\$21.07	\$39.13
Tile Setters	<i>Skilled</i>	\$36.12	\$21.07	\$57.19
	<i>Semiskilled</i>	\$27.09	\$21.07	\$48.16
	<i>Unskilled</i>	\$18.06	\$21.07	\$39.13
Terrazzo Mechanic	<i>Skilled</i>	\$36.12	\$21.07	\$57.19
	<i>Semiskilled</i>	\$27.09	\$21.07	\$48.16
	<i>Unskilled</i>	\$18.06	\$21.07	\$39.13
Marble Setters	<i>Skilled</i>	\$36.12	\$21.07	\$57.19
	<i>Semiskilled</i>	\$27.09	\$21.07	\$48.16
	<i>Unskilled</i>	\$18.06	\$21.07	\$39.13
Pointer/Cleaner/Caulker	<i>Skilled</i>	\$36.12	\$21.07	\$57.19
	<i>Semiskilled</i>	\$27.09	\$21.07	\$48.16
	<i>Unskilled</i>	\$18.06	\$21.07	\$39.13
Tile, Marble & Terrazzo Finishers	<i>Skilled</i>	\$28.29	\$11.07	\$39.36
	<i>Semiskilled</i>	\$21.21	\$11.07	\$32.28
	<i>Unskilled</i>	\$14.14	\$11.07	\$25.21
Carpenters	<i>Skilled</i>	\$37.42	\$25.30	\$62.72
	<i>Semiskilled</i>	\$31.81	\$25.30	\$57.11
	<i>Unskilled</i>	\$20.58	\$17.01	\$37.59
Carpet Layers	<i>Skilled</i>	\$37.42	\$25.30	\$62.72
	<i>Semiskilled</i>	\$31.81	\$25.30	\$57.11
	<i>Unskilled</i>	\$20.58	\$17.01	\$37.59
Cement Masons	<i>Skilled</i>	\$36.66	\$23.40	\$60.06
	<i>Semiskilled</i>	\$29.32	\$23.40	\$52.72

	Unskilled	\$21.99	\$23.40	\$45.39
Drywall Installers	Skilled	\$37.42	\$25.30	\$62.72
	Semiskilled	\$31.81	\$25.30	\$57.11
	Unskilled	\$20.58	\$17.01	\$37.59
Electricians	Skilled	\$39.00	\$23.41	\$62.41
	Semiskilled	\$23.40	\$22.94	\$46.34
	Unskilled	\$15.60	\$8.49	\$24.09
Elevator Constructors	Skilled	\$49.90	\$31.08	\$80.98
	Semiskilled	\$39.92	\$30.28	\$70.20
	Unskilled	\$24.95	\$29.08	\$54.03
Glaziers	Skilled	\$33.00	\$19.32	\$52.32
	Semiskilled	\$24.75	\$19.32	\$44.07
	Unskilled	\$16.50	\$19.32	\$35.82
Iron Workers	Skilled	\$39.50	\$26.78	\$66.28
	Semiskilled	\$35.55	\$26.78	\$62.33
	Unskilled	\$29.63	\$26.78	\$56.41
Sheeter	Skilled	\$39.75	\$26.78	\$66.53
	Semiskilled	\$35.80	\$26.78	\$62.58
	Unskilled	\$29.88	\$26.78	\$56.66
Fence Erector	Skilled	\$30.11	\$20.93	\$51.04
	Semiskilled	\$27.10	\$20.93	\$48.03
	Unskilled	\$21.08	\$20.93	\$42.01
Laborers I	Skilled	\$37.68	\$17.10	\$54.78
	Semiskilled	\$36.98	\$17.10	\$54.08
	Unskilled	\$36.18	\$17.10	\$53.28
Laborers II	Skilled	\$38.43	\$17.10	\$55.53
	Semiskilled	\$37.73	\$17.10	\$54.83
	Un-Skilled	\$36.93	\$17.10	\$54.03
Laborers II A Asbestos Removal	Skilled	\$38.68	\$17.10	\$55.78
	Semiskilled	\$37.98	\$17.10	\$55.08
	Un-Skilled	\$37.18	\$17.10	\$54.28
Millwrights	Skilled	\$37.52	\$25.35	\$62.87
	Semiskilled	\$31.89	\$25.35	\$57.24

	Unskilled	\$20.64	\$17.06	\$37.70
Operating Engineers	Skilled	\$39.30	\$27.88	\$67.18
	Semiskilled	\$34.20	\$27.88	\$62.08
	UnSkilled	\$20.55	\$24.78	\$45.33
Operating Engineers Great Lakes Floating Agreement	Skilled	\$47.20	\$26.55	\$73.75
	Semiskilled	\$45.70	\$26.55	\$72.25
	Unskilled	\$40.65	\$26.55	\$67.20
Painters Painter/Vinyl Hanger	Skilled	\$33.99	\$21.79	\$55.78
	Semiskilled	\$25.49	\$10.96	\$36.45
	Unskilled	\$17.00	\$10.37	\$27.37
Painters Drywall Finisher	Skilled	\$34.79	\$21.79	\$56.58
	Semiskilled	\$26.09	\$10.96	\$37.05
	Unskilled	\$17.40	\$10.37	\$27.77
Painters Industrial Painter - Spray/Blast	Skilled	\$36.79	\$21.79	\$58.58
	Semiskilled	\$27.59	\$10.96	\$38.55
	Unskilled	\$18.40	\$10.37	\$28.77
Piledrivers	Skilled	\$43.35	\$28.12	\$71.47
	Semiskilled	\$28.18	\$27.63	\$55.81
	Unskilled	\$20.03	\$16.60	\$36.63
Piledrivers Commercial Divers	Skilled	\$65.02	\$28.12	\$93.14
Pipefitters & Steamfitters	Skilled	\$46.00	\$27.03	\$73.03
	Semiskilled	\$35.88	\$12.00	\$47.88
	Unskilled	\$18.40	\$3.00	\$21.40
Plasterers	Skilled	\$32.88	\$16.22	\$49.10
	Semiskilled	\$26.30	\$16.22	\$42.52
	Unskilled	\$19.73	\$16.22	\$35.95
Plumbers	Skilled	\$38.37	\$20.54	\$58.91
	Semiskilled	\$24.94	\$17.72	\$42.66
	Unskilled	\$17.27	\$8.23	\$25.50
Roofers	Skilled	\$35.30	\$18.69	\$53.99
	Semiskilled	\$28.24	\$13.19	\$41.43
	Unskilled	\$17.65	\$13.19	\$30.84
Sheet Metal Workers	Skilled	\$42.00	\$21.08	\$63.08
	Semiskilled	\$25.20	\$18.37	\$43.57
	Unskilled	\$16.80	\$17.08	\$33.88
Sprinkler Fitters #281 projects on North Side of	Skilled	\$47.25	\$21.43	\$68.68
	Semiskilled	\$30.70	\$21.43	\$52.13

Rt. 30	Unskilled	\$21.90	\$11.93	\$33.83
Sprinkler Fitters #669 projects on South Side of Rt. 30	Skilled	\$33.37	\$17.63	\$51.00
	Semiskilled	\$21.58	\$17.63	\$39.21
	Unskilled	\$16.85	\$8.66	\$25.51
Stagecraft Workers	Skilled	\$34.17	\$3.75	\$37.92
	Semiskilled	\$24.38	\$2.68	\$27.06
	Unskilled	\$17.10	\$1.88	\$18.98
Teamsters	Skilled	\$32.49	\$21.93	\$54.42
	Semiskilled	\$25.99	\$21.93	\$47.92
	Unskilled	\$16.25	\$21.93	\$38.18
Technical Engineers	Skilled	\$38.18	\$22.42	\$60.60
	Semiskilled	\$32.68	\$22.42	\$55.10
	Unskilled	\$24.18	\$22.42	\$46.60
Telecommunications	Skilled	\$26.93	\$12.07	\$39.00
	Semiskilled	\$17.50	\$11.79	\$29.29
	Unskilled	\$13.45	\$6.86	\$20.31
Truck Mechanics	Skilled	\$31.79	\$21.93	\$53.72
	Semiskilled	\$31.59	\$21.93	\$53.52
	Unskilled	\$31.19	\$21.93	\$53.12

The common construction wage rates listed below
are for Heavy/Highway type of construction work

C. HEAVY HIGHWAY WAGE RATES

		HOURLY		
<u>CLASSIFICATION</u>	<u>CLASS</u>	<u>RATE</u>	<u>FRINGES</u>	<u>TOTAL:</u>
Cement Masons	Skilled	\$32.45	\$17.04	\$49.49
	Semiskilled	\$25.96	\$17.04	\$43.00
	Unskilled	\$19.47	\$17.04	\$36.51
Laborers I	Skilled	\$30.24	\$12.96	\$43.20
	Semiskilled	\$29.74	\$12.96	\$42.70
	Unskilled	\$29.24	\$12.96	\$42.20
Laborers II Utility Wage	Skilled	\$30.22	\$12.96	\$43.18
	Semiskilled	\$29.72	\$12.96	\$42.68
	Unskilled	\$29.22	\$12.96	\$42.18
Operating Engineers Four County Highway	Skilled	\$39.75	\$26.60	\$66.35
	Semiskilled	\$35.70	\$26.35	\$62.05
	Unskilled	\$23.10	\$22.30	\$45.40

Definitions:

Skilled: An individual who performs work in a classification listed on the scale of wages. It shall be presumed that an employee is a skilled worker in that classification, and entitled to receive compensation at the skilled rate, unless the worker satisfies all of the criteria for being categorized as a semi-skilled or unskilled worker.

Semi-skilled: An individual registered in a bona fide apprenticeship program registered with the United States Department of Labor, Employment and Training

Administration, Bureau of Apprenticeship and Training. Apprentices are paid pursuant to their individually warranted percentage for the classification of work that they perform as set forth in the apprentice program standards.

Unskilled: An individual with less than twelve months of cumulative experience in the construction trades and who is not registered in a bona fide apprenticeship program.

The above definitions shall not apply to workers in the classification of Laborer.

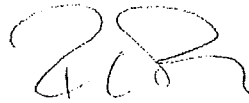
Apprenticeship Programs:

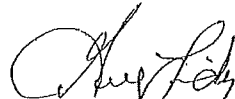
The Wage Committee determines that the common practice in the county is for contractors to participate in bona fide apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training and that the rate of pay for the classifications of labor that participate in such programs is based in part on a percentage of the journeyman's rate (skilled rate herein) depending on the individual's progress in the program.


Workers engaged in such an apprenticeship program will be permitted to work at less than the predetermined rate set out above for the work they perform. Such apprentices must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate which is the skilled hourly rate in this wage scale.


Any worker who is not registered or otherwise employed in a bona fide apprenticeship program registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training and has twelve or more months of cumulative experience in the construction trades shall be paid at the skilled wage rate on this wage determination for the classification of work actually performed by the worker regardless of how the employer classifies such a worker.

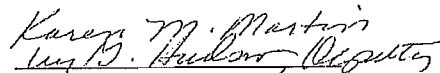
Disputes regarding the appropriate classification of workers and the amounts said workers should be paid may be submitted to the Indiana department of Labor for investigation.


Indiana State AFL-CIO Representative


Awarding Agency Representative


ABC Representative


Taxpayer Named by Approving Agency


Taxpayer Named by
County Legislative Body

April, 6, 2015
Date

SECTION 0400
CASH ALLOWANCES

1. CASH ALLOWANCES: Cash allowances, as described in the General Conditions and the various technical sections, shall be included as follows:

<u>DIVISION OF WORK</u>	<u>MONETARY AMOUNT</u>	<u>ALLOWANCE ITEM</u>
GENERAL CONTRACTOR:	\$ 10,000.00	AUTHORIZED WORK

2. INCLUSION IN BID: All allowances are to be included in the Base Bid for the Prime Contract specified.
Note: All allowances listed in this section include material and labor for additional or specific work as needed. Any overhead or profit mark-ups shall be included in contractor's base bid.
3. CASH ALLOWANCES are described in Article 3.8 of the "General Conditions of the Contract for Construction, 2007 Edition, AIA Document A201" which is reproduced below:

3.8 ALLOWANCES

3.8.1 *The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities against which the Contractor makes reasonable objection.*

3.8.2 *Unless otherwise provided in the Contract Documents:*

- .1** *materials and equipment under an allowance shall be selected promptly by the Owner to avoid delay in the Work;*
- .2** *allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;*
- .3** *Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum and not in the allowances;*
- .4** *whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Clause 3.8.2.2 and (2) changes in Contractor's costs under Clause 3.8.2.3.*

- END -

SECTION 1010
SUMMARY OF WORK

PART 1 - GENERAL

1.05 DESCRIPTION:

All requirements of the Project Manual shall apply to work of this Section.

A. A single "Lump Sum" Contract will be awarded as specified in Section 0100 Notice to Bidders, for all work on this Project.

B. Related Work Specified Elsewhere:

Notice to Bidders	Section 0100
Instructions to Bidders	Section 0110
Cash Allowances	Section 0400

1.06 TIME OF COMPLETION:

Work shall commence upon immediately after June 14, 2015 and shall be completed by August 21, 2015..

1.07 SUBMITTALS:

A. See Spec. Section 1300 For Procedures for Submission of Shop Drawings and Samples. Submit samples and Shop Drawings as required under technical specifications and paragraphs C & E below.

B. Shop Drawings: Submit Shop Drawing to Architect for review prior to fabrication or delivery of the following items:

C. Submit at least four prints and applicable product brochures to Architect for approval in the following areas:

Track Striping Layout Drawings

D. Also, submit any other Shop Drawings or Manufacturer's literature required by specific direction in the Project Manual for items not listed above.

E. Samples: Submit to Architect, for approval, the following samples:

Synthetic Surfacing
Paint Striping/Colors

1.08 JOB CONDITIONS:

A. The General Contractor shall schedule, manage, and expedite all work under this Contract, coordinating his work with that of his various Subcontractors, material suppliers, and trades so that no conflicts of time or location occur.

B. It shall be obligatory upon the various Subcontractors, before proceeding with the work, to examine the installations made by others, and the conditions created thereby, which in any manner affect the proper installation of their materials.

- C. Should any such adverse conditions be encountered or anticipated, the matter shall be brought to the attention of the Contractor and Architect in writing. Failure to do so, and/or proceeding with the work, shall be considered as the acceptance of the surface and/or conditions by that Contractor.
- D. The Contractor shall do all cutting, fitting, or patching of his work that may be required to fit work of other Contractors or Subcontractors, as indicated or reasonably inferred by the Drawing and Specifications.
- E. Any cost of defective or ill-timed work shall be borne by the party responsible therefore.

1.09 DIVISION OF WORK:

- A. Demolition: Any demolition and patching required under this Contract to complete any Division of work shall be accomplished by respective Subcontractor. Patching shall match existing adjacent finish.

1.10 WORK COVERED:

- A. Secure and pay for, as necessary for proper execution and completion of work, and as applicable at time of receipt of bids:
 - 1. Permits
 - 2. Government Fees
 - 3. Licenses (Town of Chesterton)
- B. Give required notices.
- C. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities, which bear on performance of work.
- D. Promptly submit written notice to Architect of observed variance of Contract Documents from legal requirements, building codes, or other regulations.
 - 1. Appropriate Modifications to Contract Documents will adjust necessary changes
 - 2. Contractor shall assume responsibility for work known to be contrary to such requirements, without notice.
- E. Should conditions of work, or schedule, indicate change of materials or methods, submit written recommendation to Architect/Engineer, for alternative materials or methods.
- F. Costs caused by ill-timed or defective work, or work not conforming to Contract Documents, including costs for additional services of Architect/Engineer: party responsible for ill-timed, rejected or non-conforming work.

- 1.11 FIELD VERIFICATIONS: All Prime Bidders shall visit Project/Projects for which bid is being submitted. Successful bidder shall field verify all dimensions prior to fabricating any equipment or commencing material installation. No "EXTRA" will be given for work that could have been reasonably verified by Contractor.
- 1.12 SCHEDULING: Carefully schedule timing of all work including Demolition, Installation and Clean-up with Owner and Architect and other Contractors so that Owner's forces may have ample notice to install their equipment and otherwise prepare work areas as necessary.
- 1.13 Cash Allowances: See Specification Section 0400!

- END -

the first of these is the fact that the
the second is the fact that the
the third is the fact that the

the fourth is the fact that the

the fifth is the fact that the

SECTION 1050
SCHEDULE OF VALUES

1.01 GENERAL

- A. Related Requirements Specified Elsewhere:
Instructions to Bidders Section 0110.
- B. Submit to the Architect: Schedule of Values, at least 10 days prior to submitting first Application for Payment.
- C. Upon request by Architect, support values given with data that will substantiate their correctness.
- D. Submit quantities of designated materials.
- E. List quantities of materials specified under Unit Prices.
- F. Payment for materials stored on site will be limited to those materials listed in Schedule of Unit Material Values.
- G. Use Schedule of Values only as basis for Contractor's Application and Certificate for Payment, AIA, G702 and Continuation Sheet.

1.02 FORM OF SUBMITTAL

- A. Submit typewritten Schedule of Values on 8 ½" x 11" white paper.
- B. Use Index of this Project Manual as basis for format for listing costs of work for sections under Divisions 2-16.
- C. Identify each line item with number and title as listed in the Index to Project Manual.

1.03 PREPARING SCHEDULE OF VALUES

- A. Itemize separate line item cost for each of the following general cost items:
 - 1. Performance and Payment Bonds
 - 2. Field Supervision and Layout
 - 3. Temporary Facilities and Controls
 - 4. Cash Allowances
- B. Itemize separate line item cost for work required by each Section of the Project Manual.
- C. Break down installed costs into:
 - 1. Delivered cost of product.
 - 2. Total installed cost, with overhead and profit.
- D. Make sum of total costs of all items listed in schedule equal of Contract Sum.

1.04 PREPARING SCHEDULE OF UNIT MATERIAL VALUES:

- A. Submit separate Schedule of Unit Prices for Materials to be stored on which progress payments will be made.
- B. Make form of submittal parallel to Schedule of Values, with each line item identified same as line item in Schedule of Values.
- C. Include in Unit Prices only:
 - 1. Cost of material.
 - 2. Delivery and unloading at site.
- D. Make sure that unit prices multiplied by quantities given equal material cost of that item in Schedule of Values.

1.05 REVIEW AND RESUBMITTAL

- A. After review by Architect, revise and resubmit Schedule (and Schedule of Material Values) as required.

- END -

SECTION 1100
ALTERNATES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. All applicable requirements of the Project Manual apply to work of this Section.
- B. Related Requirements Specified Elsewhere:
 - 1. Basis of Awards: Instructions for Bidders - Section 0110
 - 2. The Sections of the Specifications as listed under the respective alternates.
- C. This Section describes the changes to be made under each Alternate.
- D. The referenced specification sections contain the pertinent requirements for materials and methods to achieve the work described herein.
- E. Coordinate pertinent related work and modify surrounding work as required to complete the Project under each Alternate designated in the Owner/Contractor Agreement.
- F. Furnish all labor, materials and equipment for proper and complete execution of accepted alternates. Amount of "Alternate Prices" to be added or deducted from the "Base Bid" shall be stated on the Proposal Form. Indicate prices per Proposal Form Section 0130.

1.02 DESCRIPTION OF ALTERNATES:

(See Project Drawing for additional information)

State the Amount:

GC-1: If existing pole vault runway is REMOVED and replaced with topsoil and hydroseed.

ADD \$ _____

GC-2: If both existing broad jump pits and curbs are removed and replaced with new concrete curbed pits as detailed on the drawings.

ADD \$ _____

GC-3: If Alternate synthetic surfacing system is utilized for this project in lieu of Base Bid "Seal-Flex, LR-6 system": System shall be minimum 5/16" to 3/8" thick, utilizing uniformly graded EPDM, stranded rubber, granulated or chunk rubber bound with minimum of 5 coats of latex binder. Subject to compliance with project requirements, products/ systems by the following manufacturers will be considered for this alternate:

- a. Seal-Flex LR-5 System as manufactured by Seal-Flex Corporation).

- b. "Mayflex BL" as manufactured by Precision Sports, Inc. (800-488-9628)
- c. "Reflex I-V.L.S." as manufactured by Leslie Coatings Inc., Indianapolis, Indiana (Phone: 877-428-0465).
- d. "Top Trax Surfacing System" as manufactured by All American Tracks Corporation, Amherst, Ohio (Phone: 800-667-9619).
- e. "Resilo-Flex" as manufactured by Site Technology, Inc., Stow, Ohio (Phone: 330-688-9800).
- f. Products of above manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified products. Requests for approval must be received by the Architect no later than 5 working days prior to bid due date.

ADD \$ _____ or DEDUCT \$ _____

Name of Alternate Synthetic Surfacing System proposed:

- END -

SECTION 01300
SUBMITTALS

PART 1 - GENERAL

1.01 REQUIREMENTS

- A. All requirements of the Project Manual shall apply to work of this Section.
- B. Submit samples and shop drawings listed in Section 1010 and other Specification Sections.
- C. Submit four (4) copies or prints of Shop Drawings to the Architect identified by Job Title, Manufacturer, Contractor and Date. Location of each item shall be noted.
- D. No Shop Drawings shall be used on the Project that do not bear the stamp of approval of the Prime Contractor and review by Architect/Engineer.
- E. No materials shall be used which do not equal approved samples.

1.02 SAMPLES

- A. Each sample and Manufacturer's literature shall be labeled to indicate the name of the project, name of Contractor, manufacturer, brand, job number, and Federal Specification or ASTM Number where required. In addition, catalogs shall be marked to indicate the specific items submitted for approval.
- B. Samples of all roofing materials and related coping, trim, drip edges, flashing, etc. shall be submitted to Architect for approval prior to starting work. All samples shall be submitted within 21 days of Award of Contract.
- C. The right is reserved to require submission of samples of any material or any material lists, whether or not particularly mentioned herein.

1.03 SHOP DRAWINGS

- A. Shop, erection or setting drawings in the form of prints for the purpose of annotation by the Architect who will return for corrections and resubmittal. After submittal and final review by the Architect, each party who is to receive copies shall reproduce the number of copies required for his use. SUBMIT SHOP DRAWINGS TO ARCHITECT FOR REVIEW NO LATER THAN 3 WEEKS AFTER OWNER-CONTRACTOR AGREEMENT IS SIGNED.
- B. For standard manufactured items that are covered by printed shop drawings, such as wiring diagrams in connection with electrically operated equipment, catalog cuts, printed specifications, etc., Contractor shall submit sufficient number of copies of each to allow the Architect to retain two copies for his use.

- C. Contractor shall check the shop drawings of subcontractors for accuracy, shall ascertain that all work contiguous with and having bearing on other work shown on shop drawings is accurately drawn, and that the work shown is in conformity with the Contract requirements.
- D. All such drawings and details, at the time of submission must bear the date, signature and stamp of approval of the Contractor as evidence that such drawings and dimensions have been checked by the Contractor.
- E. Submission of Shop Drawings (in either the original submission or when resubmitted with corrections) constitutes evidence that the Contractor has checked all information thereon, and that he accepts and is willing to perform the work, as shown, in a workmanlike manner and in accordance with the best standard practice. No claim for an extra shall be based on work shown on Shop Drawings, unless such claim is noted on the Contractor's transmittal letter accompanying the Shop Drawings.

- END -

SECTION 1400
CLEANING-UP

PART 1 - GENERAL

1.01 REQUIREMENTS

- A. All requirements of the Project Manual shall apply to work of this Section.
- B. See General Conditions, Article on Cleaning-up.
- C. In addition, the following special cleaning shall be done by the General Contractor or designated subcontractors:
 - 1. Clean all newly installed items of all dirt, grease, and foreign matter.
 - 2. Remove all tags and labels from new fixtures and equipment.
 - 3. Remove all foreign material from lawn and site areas. Repair any such areas damaged during construction.
 - 4. Restore and repair any area of site damage during construction.
- D. The Contractor and/or Subcontractor shall be responsible for removal of trash, excess materials and scraps, and leave broom clean those areas in which he worked on a Daily Basis. Further, debris stored outside shall be kept in a suitable enclosure (dumpster, etc.) until it is hauled from site.
- E. Contractor shall protect site areas adjacent to work. Contractor will be held accountable for any damages or soiling that may occur due to the work of his forces or those of his various subcontractors.

- END -

SECTION 1500
TEMPORARY FACILITIES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. All applicable requirements of the Project Manual apply to work of this Section.

PART 2 - PRODUCTS

2.01 TEMPORARY CONSTRUCTION

- A. Temporary Structures required by Contractors for storage or other purposes in the performance of their contracts shall be located and erected only with approval of the Owner and shall be removed and premises cleaned of all debris when directed. Area used for Temporary Structures shall be returned to original condition at completion of Project.
- B. Office and Storage Trailers: - Not required by General Contractor
- C. Temporary Enclosures: - Not required by General Contractor
- D. Site Repair: Repair and/or replace disturbed areas prior to finish grading, including sidewalks, asphalt paving, and lawn work.
- E. Contractor's Parking: A portion of existing adjacent parking lot shall be designated by Owner for use by Contractor and Contractor Employees' vehicles. Do not interfere with school traffic.

PART 3 - EXECUTION

3.01 TEMPORARY UTILITIES & SERVICES

- A. Temporary Water: General Contractor shall make all necessary arrangements to tie into existing water supply in adjacent building. Cost of water consumption shall be borne by Owner.
- B. Temporary Electrical Service: General Contractor may use existing electrical service for construction. Electrical Subcontractor shall extend power to work site. Use grounded temporary outlets for power, per N.E.C. Cost of power consumption shall be borne by Owner.

3.02 PROTECTION

- A. Pumping and Drainage: Sump, pump, and drain all water, which may be discharged into any portion of track area during construction.
- B. Care of Piping: Make provision to prevent any building material from getting into any of the existing storm drainage system during construction work. Keep materials out of piping by protecting as required. Should piping be stopped up due to the operations of Subcontractor, the expense involved in

cleaning such piping shall be borne by the applicable Contractor causing the stoppage.

- C. Display of Light and Barricades: General Contractor shall provide lights, and barricades on all obstructions and hazards, which may in any way affect the public safety. Comply with IOSHA and local requirements.
 - D. Fire Protection: General Contractor shall provide multi-purpose dry chemical extinguishers. Units shall be mounted in a protective red enclosure plainly marked and easily accessible. Follow all IOSHA standard for location, type, and required numbers of fire extinguishers. In addition, wherever and whenever any burning, welding, cutting or use of volatile liquids are in progress, or equipment is in use, or any work involving a fire hazard is performed, the Contractor responsible for such operation shall have at all times, acceptable fire extinguishers or protection within ten (10) feet of the operation.
 - E. Contractor's Equipment: Each Contractor must take necessary precautions for protection and security in regards to his equipment, tools, materials, and all other related items. The School Corporation does not carry insurance to cover theft of Contractor's tools, equipment or stored material.
 - F. First Aid: General Contractor shall maintain first-aid station on-site at accessible, marked area. Emergency telephone number list shall be posted near job telephone. Comply with IOSHA Regulations.
- 3.03 SANITATION: General Contractor shall provide and maintain one sanitary temporary Toilet for use throughout the construction period by all trades. Jobsite temporary toilet shall be kept in proper sanitary condition and shall be periodically empties by licensed disposal hauler.
- 3.04 CONSTRUCTION OFFICE: - Not Required -
- 3.05 TEMPORARY TELEPHONE: - Not Required -
- 3.06 DUMPSTER/SITE CLEAN-UP:
General Contractor shall furnish construction dumpster for disposing of construction debris throughout project term. Empty dumpster at intervals as necessary. Each subcontractor shall be responsible for clean-up of their own debris from building area and site. Clean-up such debris on a regular basis. Do not allow debris to build up. Secure all materials to prevent same from blowing into street or onto neighboring properties. General Contractor shall broom sweep building area on a weekly basis (more often if necessary).
- 3.07 TEMPORARY PARKING
Construction personnel shall park vehicles in adjacent parking lot where designated by Owner. Cost of repair of adjacent property or paving damaged by Contractors use shall be borne by General Contractor.

- END -

SECTION 1700
PROJECT CLOSEOUT

PART 1 - GENERAL

1.01 REQUIREMENTS

- A. All requirements of the Project Manual shall apply to work of this Section.
- B. Deliver to the Architect for transmission to the Owner, the following Submissions.

1.02 SUBMISSIONS

- A. Release or Waiver of Liens: per AIA General Conditions, Article 9.9.4 and State of Indiana laws.
- B. "Record Drawings": Keep up-to-date one (1) set of prints on the Project at all times with all changes, errors, omissions and all corrections noted plainly thereon.
- C. After acceptance of the Project by the Owner, provide all of the above required information on reproductions or marked drawings. Certify on the title sheet that the information contained is true and correct.
- D. Obtain Architect's approval of the corrected reproductions and then submit "as-built" drawings to the Architect.
- E. Operation & Maintenance Manuals:
 - 1. Furnish Architect with three (3) sets of instructions for the care and maintenance of synthetic track surface materials and equipment.
- F. Guarantees:
 - Those written guarantees where specified for more than one (1) year.

- END -



K&S ENGINEERS, INC.

9715 KENNEDY AVENUE • HIGHLAND, INDIANA 46322
(219) 924-5231 • (773) 734-5900 • FAX (219) 924-5271

www.kandsengineers.com • info@kandsengineers.com

March 27, 2015

File No. 11292

Duneland School Corporation
601 West Morgan Avenue
Chesterton, IN 46304

Attn.: Mr. Greg Lindy

REPORT

GEOTECHNICAL ENGINEERING EXPLORATION PROPOSED IMPROVEMENTS RUNNING TRACK, CHESTERTON MIDDLE SCHOOL 651 W. MORGAN AVE., CHESTERTON, INDIANA

Dear Mr. Lindy:

Pursuant to your request, K & S Engineers, Inc., (K & S) is pleased to present this report of a geotechnical exploration which was performed in connection with the proposed improvement of the running track at the above referenced site in Chesterton, Indianan. The investigation was performed in accordance with criteria outlined in our Proposal No. 9954 dated March 13, 2015 and your subsequent authorization.

PROJECT DESCRIPTION

Duneland School Corporation is planning the resurfacing of running track at Chesterton Middle School. It was requested to core the existing track at three locations in order to determine the thickness of rubber surface, asphalt base, and crushed stone sub-base. In addition to coring, it was also requested to evaluate the subsurface soil to a depth of about 5 feet below the existing grade. The boring/coring locations sketch was provided by Mr. Bob Gerometta of G & K Architects, Inc. A copy of this report is being forwarded to Mr. Bob Gerometta.

PURPOSE AND SCOPE

The purpose of this geotechnical exploration was to measure the rubber surface, asphalt and crushed stone base thicknesses for the existing pavement and also to evaluate the subsurface soil conditions to an approximate depth of 5 feet. The scope of work included coring through the asphalt pavement, removing the crushed stone base, and sampling the subsurface soil by a track mounted geo-probe drill rig, engineering analysis of the pertinent geotechnical data, and preparation of this report. Samples obtained during this exploration will be retained in our facility for a period of 60 days, after which time they will be discarded unless other arrangements are made.

Approximate boring/coring locations are shown on Site Plan and Boring Locations, Exhibit-1, and typed boring logs are presented on Exhibits 2, 3 and 4. Relevant findings, conclusions, and recommendations derived from this exploration are presented in the following text.

FIELD EXPLORATION

The rubber/asphalt pavement was cored at three proposed location using a portable coring machine. Upon coring and measuring the sub-base crushed stones thicknesses, the core holes were further explored to a depth of about 5 feet below the existing grade using a track mounted "Geo-probe" drill rig. Representative samples of soil were obtained using split-spoon sampling procedure in general conformance with ASTM Standard D-1586. Perched water or groundwater level observations were made in the bore holes during and after the drilling and sampling operations. The groundwater level readings are shown on the boring logs.

It should be noted that stratification lines on the soil boring/coring logs represent approximate transitions between material types. In-situ stratum changes could occur gradually or at slightly different depths. Also, the logs depict conditions disclosed at the particular location and times indicated. Some conditions, particularly groundwater levels are subject to seasonal and long term variations in response to climate conditions and man-made influences.

LABORATORY TESTING

The asphalt core and soil samples obtained from each boring location were logged, labeled, sealed and transported to our laboratory for further examination, classification and testing. Thickness of the pavement cores were measured for each core to establish the rubberized surface, asphalt surface and asphalt binder thickness. The soil samples were visually classified by an experienced soils engineer, based upon texture and plasticity in general conformance with the Unified Soil Classification System (ASTM D-2487). Natural moisture content and calibrated pocket penetrometer resistance (PPR) tests were performed on all cohesive soil samples. Grain size analysis was performed on one select sand sample from Boring B-1. Standard Penetration Resistance (SPR) N-values along with natural moisture content, and PPR readings are plotted on the boring logs.

SURFACE/SUBSURFACE OBSERVATIONS AND DISCUSSION

The soil profile described below is a generalized description of the conditions encountered at the coring/boring locations. The boring logs should be referred to for more specific information.

- The thickness of rubberized surface ranged from 1/4-inch to 3/8-inch. Relatively thin layer (approximately 1/4 inch) of rubberized surface was noted at the surface of Boring B-2. However, approximately 3/8-inch layer of rubberized surface was noted at the surface of Borings B-1 and B-3. A good bonding was noted between the rubberized surface and asphalt layer at the locations of Borings B-1 and B-2. However, no bonding between rubber and asphalt layer was noted at the surface of Boring B-3 (pictures are attached for your review).
- The combined thickness of asphalt (surface & binder) ranged from 2.0 inch to 2.75 inch. The asphalt binder/base was noted only at the location of Boring B-1 which was measured to be about 1.75 inches thick. The asphalt at other locations was comprised of only surface layers. The asphalt layer was observed to be in fair condition.

- Below asphalt layer, approximately 9 to 9.5 inch thick layer of fill material comprising of dark brown to dark gray silty sand mixed with 1 to 2 inch size crushed concrete and slag was noted in the area of Borings B-1 and B-3. However, 2 to 3 inch size crushed concrete with crushed stone screenings was noted below the asphalt layer in Boring B-2.
- Below these fill materials, stiff brown sandy clay was noted to a depth of about 3 feet in all three borings, which was followed by loose to medium dense brown silty sand through the borings termination depth of 5 feet.
- The stiff consistency of silty clay was exhibited by pocket penetrometer readings (PPR) ranging from 1.25 ton per square foot (tsf) to 1.5 tsf. The loose to medium dense condition of silty sand was shown by standard penetration resistance (SPR) N-Values ranging from 9 blows per foot (bpf) to 16 bpf.

Groundwater Conditions:

Groundwater level observations were made in the bore holes during and after the drilling operations. Groundwater or perched water was not encountered during the present subsurface exploration. It should be noted that groundwater levels are subject to seasonal and long-term variations in response to climatic conditions and man-made influences.

RECOMMENDATIONS:

On the basis of this limited field exploration and visual observations of the pavement cores and underlying materials, it may be concluded that the thickness of asphalt pavement and crushed stone fill is adequate and underlying natural clay and sand subgrade is considered a suitable bearing soil. You may consider to remove the rubberized surface and place a new surface layer.

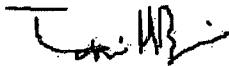
LIMITATIONS

The conclusions and recommendations presented in this report are based upon the assumption that the subsurface conditions do not deviate appreciably from those disclosed by the present exploration.

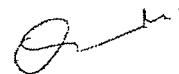
The professional services provided in connection with this project were performed in a manner consistent with the level of care and skill ordinarily exercised by an engineering firm. The opinions and conclusions presented in this report are based upon limited testing, visual observations and engineering judgement. No other representation, warranty, or guarantee is intended.

We appreciate the opportunity to work with you on this project. If you have any questions concerning this report, or if we may be of any additional services, please do not hesitate to contact our office.

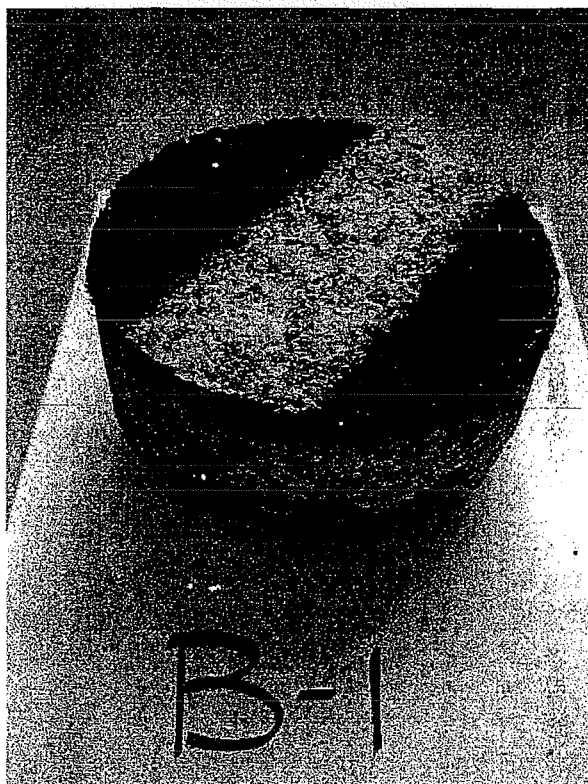
Very Truly Yours,
K&S Engineers, Inc.

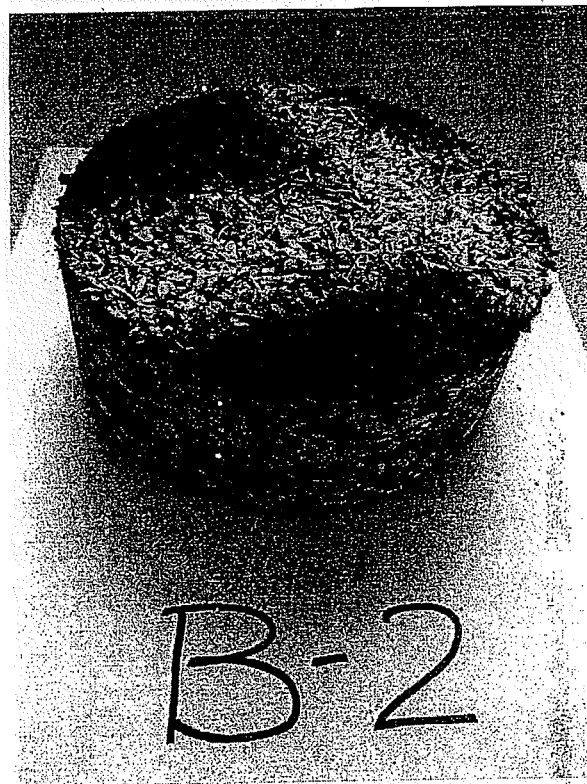
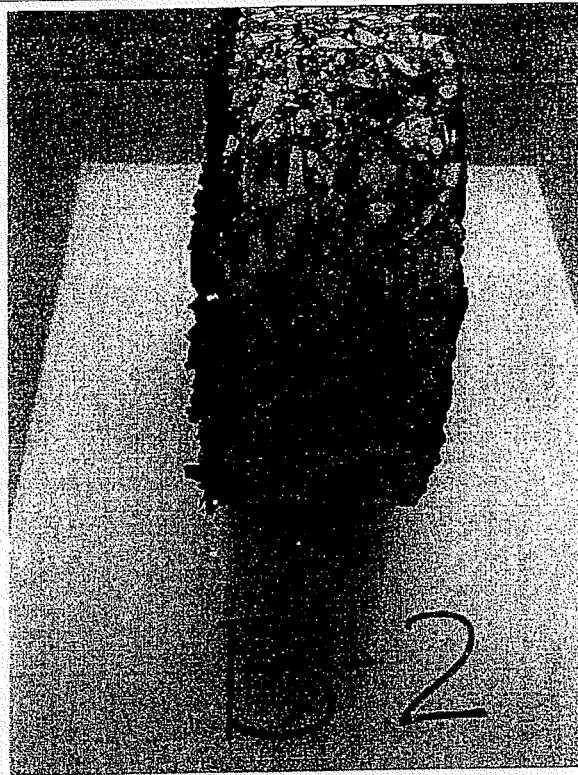


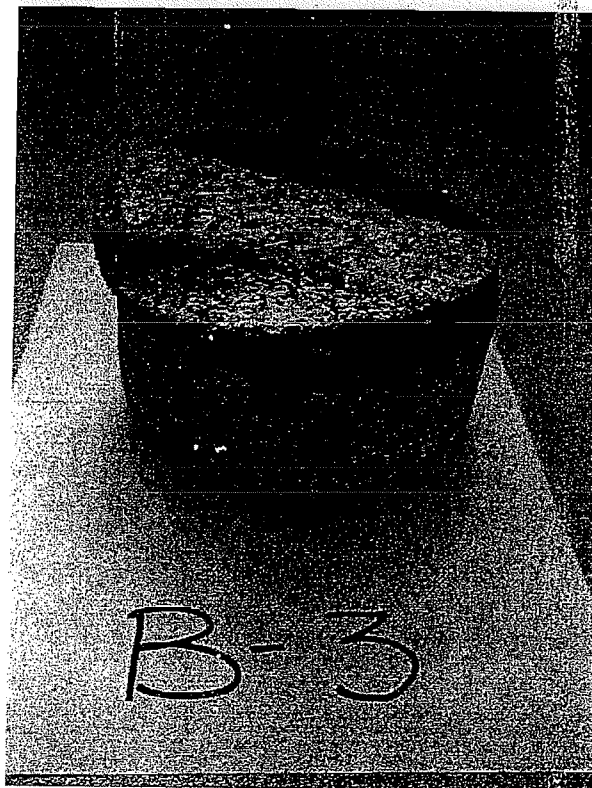
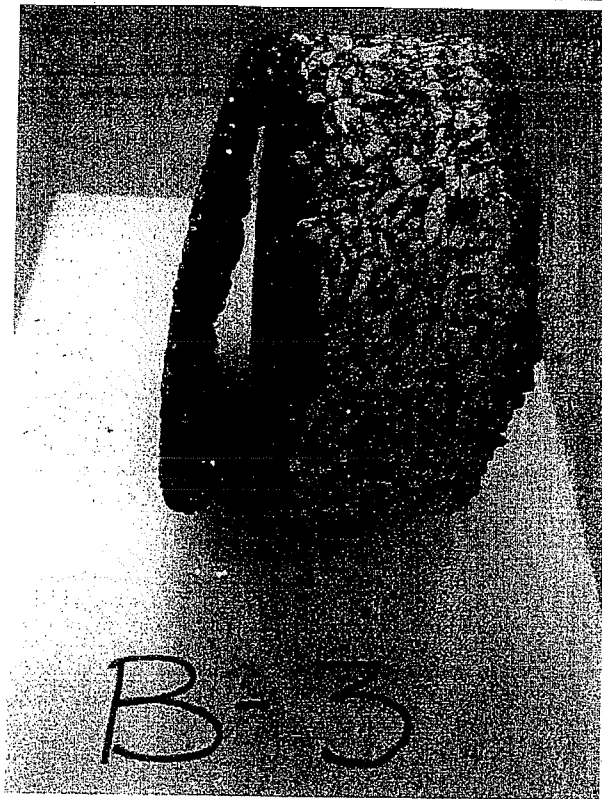
Tahir (Tony) Munawar
Project Engineer



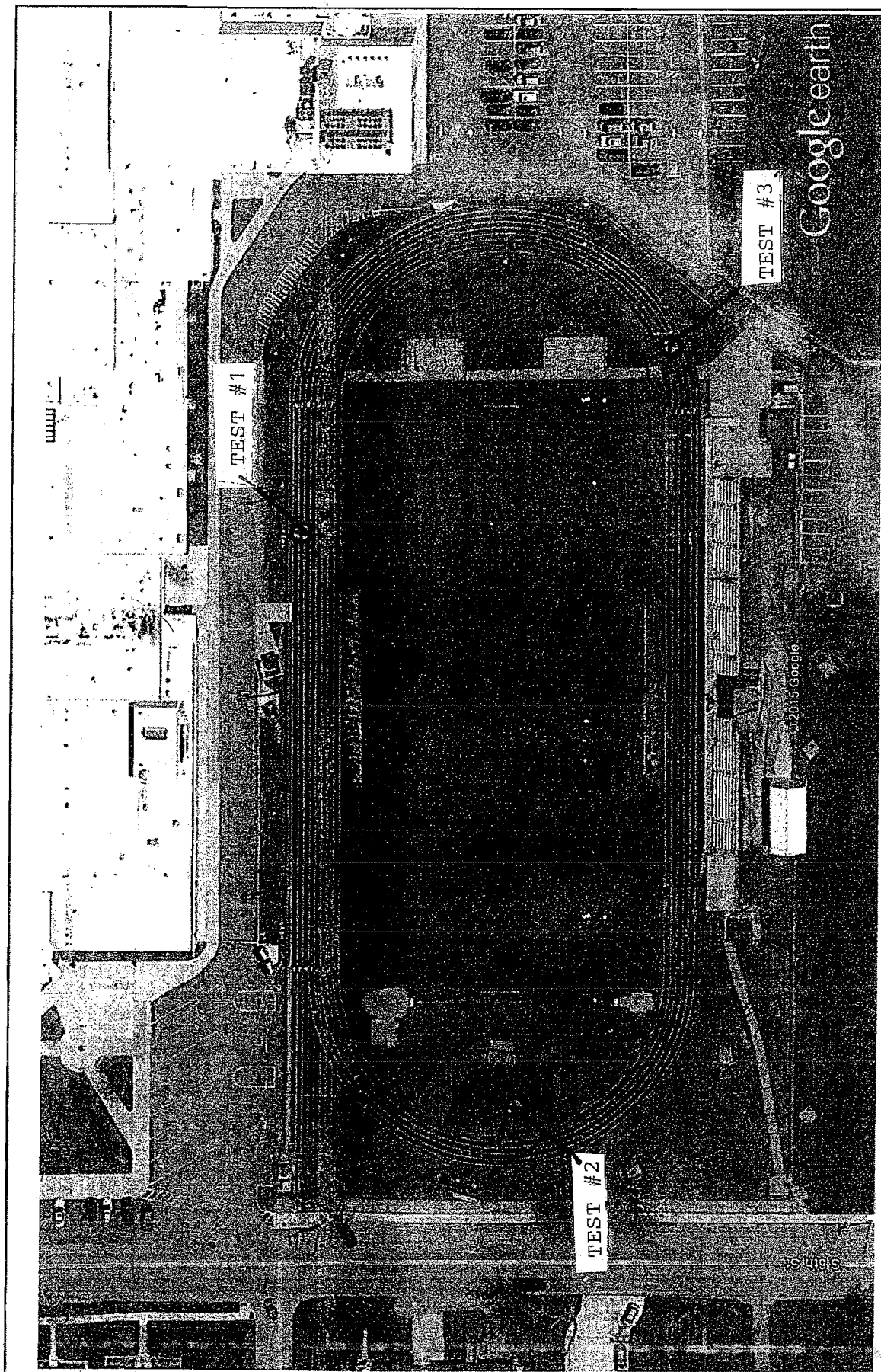
Dibakar Sundi, P.E.
Senior Engineer







APPENDIX
Boring Location Plan
Boring Logs
Gradation Curve
General Notes
General Qualifications



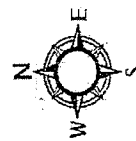
K & S ENGINEERS, INC.

SOIL TESTING AND FOUNDATION CONSULTANTS

SITE PLAN AND BORING LOCATIONS

RUNNING TRACK-CHESTERTON MIDDLE SCHOOL

651 W. MORGAN AVE., CHESTERTON, INDIANA



Date: 3-27-2015

Scale: Not to Scale


LEGEND:  Approximate Boring Location

EXHIBIT-1

File No. 11292

CLIENT Duneland School Corporation				LOG OF BORING NUMBER B-1		DES. NO.		
PROJECT NAME Running Track-Chesterton Middle School						PROJECT NO. 11292		
SITE LOCATION 651 W. Morgan Ave., Chesterton, Indiana				STRUCTURE NUMBER		STATION OFFSET		
BORING STARTED 3-18-15		RIG Geo-Probe		FILE NUMBER		⊕ CALIBRATED PENETROMETER, TONS/FT ²		
BORING COMPLETED 3-18-15		FOREMAN Ruben Perez		11292		○ UNCONFINED COMPRESSIVE STRENGTH, TONS/FT ²		
STRATA DEPTH (FEET)	SURFACE ELEVATION ft (m) USC & GS			DEPTH (FEET)	SAMPLE			0 1 2 3 4 5 6 ● WATER CONTENT, % 0 10 20 30 40 50 60 △ BLOW COUNTS 0 10 20 30 40 50 60
	TEXTURAL CLASSIFICATION	DESCRIPTION OF MATERIAL			TYPE	RECOVERY	NUMBER	
0.3	Rubber Surface - 3/8 inch Asphalt Surface - 1.0 inch Asphalt Base - 1-3/4 inch Dark Brown Silty SAND with 1 to 2 inch size CRUSHED CONCRETE and SLAG (FILL) (About 9- inches)							
1.0	Stiff Brown Sandy CLAY, Trace Silt, Moist					1		
3.0	Medium Dense Brown SAND with Silt (SP-SM), Moist					2		
5.0	End of Boring at 5 Feet							

☒ WATER LEVEL WHILE DRILLING None
☒ WATER LEVEL None Upon Completion of Drilling

☒ SPLIT SPOON ☒ SHELBY TUBE ☒ AUGER ☒ ROCK CORE
☒ PL - PLASTIC LIMIT ☒ LL - LIQUID LIMIT ☒ % UNIT DRY WEIGHT

REMARKS

BORING LOG 11292.GPJ 3-27-15

IN ORDER TO PROVIDE UNIFORMITY THROUGHOUT OUR PROJECTS, THE FOLLOWING SYSTEM HAS BEEN ADOPTED TO DESCRIBE EACH SOIL SAMPLE. ROCK, SHALE, AND OTHER MATERIALS WILL BE DESCRIBED IN DETAIL AS ENCOUNTERED.

CONSISTENCY OF COHESIVE SOILS

<u>UNCONFINED COMPRESSIVE STRENGTH, Qu, TSF</u>	<u>CONSISTENCY</u>
< 0.25	VERY SOFT
0.25 - 0.49	SOFT
0.50 - 0.99	MEDIUM
1.00 - 1.99	STIFF
2.00 - 3.99	VERY STIFF
4.00 - >	HARD

RELATIVE DENSITY OF GRANULAR SOILS

<u>"N" VALUE*</u>	<u>RELATIVE DENSITY</u>
0 - 3	VERY LOOSE
4 - 9	LOOSE
10 - 29	MEDIUM
30 - 49	DENSE
50 - >	VERY DENSE

*NUMBER OF BLOWS PER FOOT REQUIRED TO DRIVE A 2" O.D. SPLIT-SPOON SAMPLER USING A 140 LB. WEIGHT FALLING FREE FOR 30".

COLOR - AS DETERMINED ON THE FRESH MOIST SAMPLES

<u>PREDOMINATE COLORS</u>	<u>SHADES</u>	<u>MODIFYING ADJECTIVES</u>
BLACK	YELLOW	LIGHT
BROWN	RED	DARK
GRAY	BLUE	
		VARI-COLORED
		STREAKED
		MOTTLED

SOIL IDENTIFICATION TERMINOLOGY

GRANULAR SOILS

<u>COMPONENTS</u>	<u>SIZE RANGE</u>
BOULDERS	OVER 8 INCHES
COBBLES	8 INCHES TO 3 INCHES
GRAVEL	3 IN. TO #4 SIEVE (4.75 mm)
SAND	#4 SIEVE TO #200 SIEVE (0.075 mm)
SILT	PASSING #200 SIEVE (0.075 mm)

COHESIVE SOILS

<u>DESCRIPTIVE TERM</u>	<u>PLASTICITY INDEX</u>
CLAY OR ORGANIC CLAY	30
SILTY CLAY OR ORGANIC SILTY CLAY	8 - 30
<u>INTERMEDIATE SOILS</u>	
CLAYEY SILT	4 - 7
SILT	0 - 3

ESTIMATED PROPORTIONS OF MATERIAL SIZE BY WEIGHT IN PERCENT

TRACE	1 - 10
LITTLE	10 - 20
SOME	20 - 35
AND	35 - 50

WATER LEVELS ARE THOSE OBSERVED WHEN BORINGS WERE MADE, OR AS NOTED. POROSITY OF THE SOIL STRATA, VARIATIONS OF RAINFALL, SITE TOPOGRAPHY, ETC., MAY CAUSE CHANGES IN THESE LEVELS.

K & S Engineers, Inc.

9715 Kennedy Avenue Highland, IN Phone: (219) 924-5231

GENERAL QUALIFICATIONS

- This report has been prepared in order to aid in the evaluation of this property and to assist the architect and/or engineer in the design of this project. The scope is limited to the specific project and location described herein. In the event that any changes in the design or location of the building as outlined in this report are planned, we should be informed so that changes can be reviewed and the conclusions of this report modified as necessary. We recommend that we be authorized to review the project plans and specifications within our scope of work to confirm that the recommendations contained in this report have been interpreted in accordance with our intent. Without this review, we will not be responsible for misinterpretation of our data, our analysis, and/or our recommendations, nor how these are incorporated into the final design.
- The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated on the location diagram and from any other information discussed in this report. This report does not reflect any variations which may occur between these borings. In the performance of subsurface explorations, specific information is obtained at specific locations at specific times. However, it is a well-known fact that variations in soil and rock conditions exist on most sites between boring locations and also, such situations as groundwater levels vary from time to time. The nature and extent of variations may not become evident, it will be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during construction period and noting the characteristics of any variations.

E N D

2000 -16

SECTION 2100
SITE PREPARATION

PART 1: GENERAL

1.01 Related Documents

1. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.
2. Refer to Section 1100 for Alternatives that may affect the Work of this Section. Refer to Section 2000: Geotechnical Report.

1.02 Summary

1. The extent of site clearing is shown on the Drawings.
2. Site preparation work includes but is not limited to, the following:
 - a. Protection of existing fencing and lawn areas.
 - b. Protection of existing catch basins/storm drainage piping system.
 - c. Grinding/milling/removal of existing approx. 1 ½" thick existing rubberized track surface down to asphalt.
 - d. Grading/Compaction/Proofrolling of track stone and asphalt subbase. (At track width extensions).
 - e. Perform required site preparation work at long jump and high jump areas as indicated on project drawings/specifications.
 - f. Removal of existing miscellaneous items where called for on the Drawings.
3. Related Work Specified Elsewhere:
 - a. Geotechnical Report: Section 2000
 - b. Asphaltic Concrete Surfacing: Section 2500
 - c. Lawn and Grasses: Section 2930

1.03 Job Conditions

1. Protection of existing improvements
 - a. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing improvements indicated to remain in place.
 - b. Protect improvements on the Owner's property.
 - c. Restore improvements damaged by this Work to their original condition, as acceptable to the Owner or other parties or authorities having jurisdiction.
2. Protection of existing vegetation
 - a. Protect existing vegetation indicated to remain in place against
3. Obtain and pay for permits required for the execution of the Work.
4. Protect and maintain conduit, drains, sewers, pipes, and wires that are to remain. Provide and maintain markers for location of underground facilities. Cover storm drainage catch basin inlet grates with filter fabric to prevent infiltration of soils/debris during track reconstruction work. Remove coverings at completion of the project work. Clean any existing debris/soils buildup from all catch basins to a minimum depth of 6 inches below storm piping inverts typical.

PART 2: PRODUCTS

Not Applicable

PART 3: EXECUTION

3.01 Site Preparation

1. Removal of rubberized track surfacing:
 - a. Grind/mill/scrape/remove approximately 1/2" +/- thick top layer of rubberized track surface. Scrape surface material from track, or grind/mill top one inch thickness of track to remove rubber surfacing as required down to asphalt paving.
 - b. Remove all ground/milled/scraped surfacing from property and legally dispose their waste materials.
2. Where track width is expanded on south and west and as shown on drawing, sawcut edge of existing asphalt paving and remove lawn and topsoil to depth to allow installation of new stone base, asphalt binder and 1" asphalt wearing course.
3. New track layout:
 - a. Owner will provide surveyor to set grade elevation markers to guide contractor during paving operations to insure correct track surface pitch for proper drainage to existing catch basin/storm system piping which runs around inside edge of the existing concrete track curb.
4. Long Jump/High Jump Areas:
 - a. See drawings for required work in these track accessory areas.
 - b. Cut-out/Remove/Improve track accessory areas as indicated in preparation for new surfacing/reconfiguration/improvement of these areas.
 - c. Mill off existing synthetic surfacing and clean.

3.02 Installation of Compacted Aggregate Subbase (**at expansion of track width**)

1. Install new aggregate material in accordance with Section 304 of Indiana Highway Specifications and as herein specified.
2. Aggregate material shall be compacted to thicknesses indicated on the Drawings (Generally, 6" existing compacted stone subbase 2" to 2 1/2" compacted asphalt material and one inch new additional thickness of asphalt wearing course). Proofroll/compact subbase to minimum of 95% maximum dry density using heavy rollers in multiple-passes.
3. Grade Control: Maintain lines and grades, including crown and cross-slope of aggregate subbase course during entire construction/paving work.
4. Shoulders: Place shoulders along subbase course to prevent lateral movement as indicated on drawings.

3.03 Disposal of Waste Materials

1. Removal from Owner's property
 - a. Remove and legally dispose of waste materials from the Owner's property.

--END--

SECTION 2500
ASPHALTIC CONCRETE PAVING

PART 1: GENERAL

1.01 Related Documents

1. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.
2. Refer to Section 1100 for Alternatives that may affect the Work of this Section.

1.02 Summary

1. Provide labor, materials, services, and equipment necessary to provide and install asphaltic paving work at Running Track and Long Jump and High Jump areas as shown on the Drawings and specified herein.
2. The extent of asphalt paving and subbase work is shown on the Drawings and consists of the following types. (Dimensions are compacted thicknesses).

	<u>Surface Course</u>	<u>Binder Course</u>	<u>Compacted Aggregate Subbase</u>
1. Existing Running Track	1 inch	Existing to Remain	
2. Running Track Extension	1 inch	2 ½ inches	See Section 2100 Site Preparation and Drawings
3. Long Jump Runways	1 inch	Existing to Remain	Existing to Remain
4. High Jump	1 inch	Existing to Remain	Existing to Remain

3. See Spec. Section 2540 for Synthetic Surfacing/Striping work which will follow paving work.

1.03 Submittals

1. Provide 3 copies of material certificates signed by the material producer and the Contractor, certifying that each material item complies with or exceeds specified requirements.

1.04 Quality Assurance

1. Paving materials and methods shall meet the requirements of the Indiana Department of Highways Specifications, latest edition.

1.05 Job Conditions

1. Weather Limitations: Apply prime and tack coats only when ambient temperature is above 50 degrees F, and when temperature has not been below

35 degrees F for 12 hours immediately prior to application. Do not apply when base is wet or contains an excess of moisture.

- a. Construct asphalt concrete surface course only when atmospheric temperature is above 40 degrees F and when base is dry. Base course may be placed when air temperature is above 30 degrees F, and rising.
2. Grade Control: Establish and maintain required lines and elevations to ensure proper track slope for drainage.

PART 2: PRODUCTS

2.01 Compacted Aggregate Subbase (At track width extension), minimum 6" deep.

- A. See Spec. Section 2100 Site Preparation for Subbase requirements.

2.02 Paving Materials

A. General:

1. Use locally available materials and gradations which exhibit a satisfactory record of previous installations. Conform to Section 403 of Indiana Highway Specifications for hot asphalt concrete.
2. Binder Course Aggregate: Shall be No. 9 aggregate consisting of sound, angular crushed stone, crushed gravel, sand, or stone screenings. (Comply with Section 903). **At track width extensions only.**
3. Surface Course Aggregate: Shall be No. 11 aggregate consisting of crushed stone, crushed gravel, sand, or stone screenings. (Comply with Section 903).
4. Mineral Filler: Limestone dust, portland cement, or other inert material complying with Section 903.01(g) No. 16 fine aggregate.
5. Asphalt Cement: Comply with Section 902.01(b) Type AP-5.
6. Prime Coat: Cut-back asphalt Type MC-70 complying with Section 902.03(a).
7. Tack Coat: Asphalt emulsion complying with Section 902.04.
8. Splice Material: Where new paving meets existing where new running lane is added: Tenkate "Mirafi, MTK", self adhering membrane paving fabric 12 inches wide. See details on drawings.

PART 3: EXECUTION

3.01 Inspection

1. The Contractor for Work under this Section must examine areas and subgrade conditions where pavement extension and surfacing work is to be performed. Notify the Architect in writing of subgrade conditions detrimental to the proper and timely completion of the Work.
2. Do not begin Work until deficient subgrade conditions have been corrected. Starting of the Work shall constitute acceptance of the subgrade conditions, and the installation and warranty of the finished paving become the responsibility of the Contractor for this Section of the Work at this time.

3.02 Surface Preparation for Asphalt Paving (at track width extension)

1. Remove loose material from compacted aggregate base surface and areas to be resurfaced immediately before applying prime or tack coats.
2. Proofroll prepared aggregate base surface to check for unstable areas and areas requiring additional compaction. Do not begin paving work until deficient subbase areas have been corrected and are ready to receive paving.
3. Prime Coat: Apply uniformly and evenly at the rate of 0.20 to 0.50 gal. per sq. yd., over compacted aggregate base for asphalt concrete. Apply material to penetrate and seal but not flood surface. Cure and dry as long as necessary to attain penetration and evaporation of volitant.
4. Tack Coat: Apply to contact surfaces of previously constructed asphalt or Portland cement concrete and surfaces abutting or projecting into asphalt concrete pavement. Distribute at rate of 0.05 to 0.15 gal. per sq. yd. over compacted aggregate base. Allow to dry until at proper condition to receive paving.

3.03 Placing the Mix

1. General: Place asphaltic concrete mixture on prepared surface, spread and strike-off. Spread mixture at minimum temperature of 225 degrees F. Place inaccessible and small areas by hand. Place each course to required grade, cross-section, and compacted thickness.
2. Paver Placing: Place in strips not less than 10 feet wide, unless otherwise acceptable to Architect. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Complete base course for a section before placing surface course.
3. Joints: Make joints between successive days' work to ensure continuous bond between adjoining work. Construct joints to have same texture, density, and smoothness as other sections of asphalt concrete course. Clean contact surfaces and apply tack coat.
4. Ensure even slope for storm water run-off, to inside lawn area of track.

3.04 Rolling

1. General: Conform to Section 403.10 of the Indiana State Highway Specifications for compaction. Begin rolling when mixture will bear roller weight without excessive displacement. Compact mixture with hot hand tampers or vibrating plate compactors in areas inaccessible to rollers.
2. Breakdown Rolling: Accomplish breakdown or initial rolling immediately following rolling of joints and outside edge. Check surface after breakdown rolling and repair displaced areas by loosening and filling, if required, with hot material.
3. Second Rolling: Follow breakdown rolling, as soon as possible, while mixture is hot. Continue second rolling until mixture has been thoroughly compacted.
4. Finish Rolling: Perform finish rolling while mixture is still warm enough for removal of roller marks. Continue rolling until all roller marks are eliminated and the course has attained maximum density.

5. Patching: Remove and replace paving areas mixed with foreign materials and defective areas. Cut out such areas and fill with fresh hot asphalt concrete. Compact by rolling to maximum surface density and smoothness.
6. Protection: After final rolling erect barricades to protect paving from traffic until mixture has cooled and attained its maximum degree of hardness.

3.05 Field Quality Control

1. Field quality control will be performed by the Contractor. Refer to Section 1450, Quality Control.
2. Thickness: In-place compacted thickness of asphalt concrete will not be acceptable if exceeding following allowable variation from required thickness: (In no case shall total thickness of new asphalt pavement be less than 3").
 - a. Base Course: $\frac{1}{2}$ inch, plus or minus.
 - b. Surface Course: $\frac{1}{4}$ inch, plus or minus.
3. Surface Smoothness: Test finished surface of each asphalt concrete course for smoothness, using a 10 foot straightedge applied parallel with, and at right angles to, center line of paved area. Surfaces will not be acceptable if exceeding the following tolerances for smoothness:
 - a. Base Course Surface: $\frac{1}{4}$ inch.
 - b. Wearing Course Surface: $\frac{3}{16}$ inch.
 - c. Check surface areas at intervals as requested by the Architect or Owner.

3.06 Flood Test

1. Schedule: After the pavement is complete, perform a flood test in the presence of the Architect.
2. Method: Perform the flooding by use of water tank truck or available water.
3. If depressions exist where water is ponding to a depth of more than $\frac{1}{8}$ inches, fill with fresh hot asphalt concrete to provide proper drainage. Feather and smooth the edges of fill so that the joint to original surface is not visible.

3.07 New Pavement Acceptance final synthetic surfacing.

1. Notify Synthetic/Surfacing Subcontractor immediately upon completion of new track pavement installation so that an inspection of new track surface can be made to ensure that track surface is suitable/acceptable for installation of Synthetic Surfacing.
2. Make all corrections/repairs that may be required so that final synthetic surfacing work can occur and have synthetic surfacing/stripping subcontractor certify acceptability of reconstructed track surface for his installation of final synthetic surfacing.

3.08 Where new paving is spliced to existing, lay a 12" wide strip of Mirafi, MTK self adhering paving fabric at splice joint. Lap fabric 6" on each side of joint. See detail on drawings. Install per manufacturer's recommendation.

3.09 Clean-Up

1. Remove all excess pavement spoils from site immediately following completion of paving operations.

2. Remove/Clean any dirt or other foreign materials that may have become deposited on new track pavement prior to resurfacing.
3. Restrict all vehicular/equipment access to newly paved track area, etc.

--END--

SECTION 2540
SYNTHETIC SURFACING/STRIPING

PART 1: GENERAL

1.01 Related Documents

1. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.
2. Refer to Section 1100 for Alternatives that may affect the Work of this Section. (See Alternate Bid #GC-2 for bidding of synthetic surfacing systems other than Base Bid Surfacing System).

1.02 Summary

1. Provide labor, materials, services, and equipment necessary to furnish and install synthetic surfacing work as shown on the Drawings and specified herein. Work includes, but is not limited to, the following:
 - a. Surfacing of running track and field event areas.
 - b. Painting of lines, numerals, etc.
2. Provide continuous and competent supervision of Work included under this Section.
3. Work Not Included in surfacing subcontract:
 - a. Excavation, filling, grading, and compaction of subgrade under running track and field event areas is included under the Spec. Section 2100.
 - b. Asphalt binder/leveler course for running track and field event areas is included under the Spec. Section 2500.

1.03 Submittals (to Architect)

1. Manufacturer's Data: Submit copies of manufacturer's specifications and installation instructions for items required. Include data substantiating that materials comply with specified requirements. Indicate that Installer has received copy of manufacturer's instructions.
2. Samples: Submit minimum 3 inch by 3 inch sample for surface being bid.
3. Provide Owner with 3 copies of written instructions for track use and maintenance requirements in accordance with warranty requirements.
4. Layouts for Running Track (Metric) and Field Events
 - a. Submit Drawings to show the tracks and field event layouts, including metric lane markings required in accordance with The National Federation of State High School Association's High School Track and Field Rules and Records. These Drawings shall be reviewed by the Architect; then will be sent to the Owner for his comments and approval.
 - b. The layout of the track and field events shall conform with the above Drawings and with the Duneland Schools Athletic Department. Upon completion of striping and layout work, the Contractor shall submit to the Architect an "As Built Drawing" prepared by a licensed surveyor

certifying that all points and layouts shown on the approved shop drawings are located where required. This Drawing shall show the surveyor's name, address, and surveyor's license number. The cost of this Work shall be included in the Contractor's bid. (Contractor may wish to utilize service of Owner's surveyor, McMahon Associates, Inc., Valparaiso, Indiana (219) 462-7743).

1.04 Quality Assurance

1. Installation of synthetic surfacing must be performed by a contractor who has minimum of 5 years experience in the field and can demonstrate successful completion of similar projects with surfacing system specified.
2. A representative of the manufacturer of the synthetic material shall be at the job site during performance of the Work to assist and advise the asphalt plant in establishing the proper mix and to assist and advise the Contractor on all phases of the synthetic surfacing installation.

1.05 Guarantees

The Contractor hereunder guarantees the Work against defective materials or workmanship for a period of five (5) years from date of filing notice of completion and acceptance by the Owner. Provide written warranty certificate with final payment request. Warranty shall guarantee to correct failures in materials and workmanship, which occur within the warranty period, including those attributable to normal aging.

1.06 General Limitations

No phase of synthetic surfacing work scope shall take place unless the ambient temperature is above 50 degrees Fahrenheit and rising, nor when rain is imminent or falling, nor when other conditions are unsuitable per manufacturer's specs..

PART 2: PRODUCTS

2.01 General

- A. Surfacing Material: Shall be one of the following products, conforming to manufacturer's current specification. Surfacing system shall be complete and consist of all components, blended and mixed in the prescribed manner, placed and installed with the recommended equipment to provide the best-finished product available from the manufacturer.
- B. Line Marking Paint: Shall be 100% acrylic latex type, unless different type is recommended by surfacing manufacturer. The use of traffic, oil, alkyd, or solvent-vehicle type paints is prohibited.

2.02 Vented Latex Running Track Surface

- A. The latex track surface shall be a mixture of uniformly graded stranded rubber aggregate bound with successive applications of fortified latex binders. These materials are to be installed in strict accordance with manufacturer's recommendations.
- B. The Base Bid vented latex running track surface shall be a minimum of 3/8" thick, consisting of six applications of stranded rubber aggregate bound by successive applications of latex binders equal to "Seal Flex LR-6 System" as

manufactured by Seal-Flex Corporation, Wauconda, IL. Approved Regional Installers include the following:

1. American Systems Corp., Suamico, WI, 54173 (920-434-8272).
2. Athletic Field Services, Genesee Depot, WI, 53127 (262-968-9101)
3. Midwest Track Builders, Wauconda, IL, 60067 (847-438-9926)
4. Current Surfaces, Hanover, MI, 49241 (517-524-6610).

- C. Products of other manufacturers of similar synthetic surfacing systems will be considered for acceptance per provisions of Alternate Bid #GC-3, Spec. Section 1100, provided they equal or exceed the material requirements and functional qualities of the specified products. **Requests for approval must be received by the Architect no later than 5 working days prior to bid due date.**

2.03 Materials (Base Bid)

- A. Materials shall conform to manufacturer's current specification. The surfacing system shall be complete and consist of first line components, blended and mixed in the prescribed manner, placed and installed with the recommended equipment so as to provide the best finished product available from the manufacturer.

B. Description of System (Base Bid)

1. 3/8 inch thick minimum depth
2. Color: black
3. Installation includes:
 - a. One tack coat of latex binder.
 - b. Minimum 6 layers of stranded rubber aggregate bound with latex binder.
 - c. "Overspray" top layer of latex binder with UV protection.
4. Product Description (Base Bid)
 - a. Rubber:
 - (1) Stranded rubber aggregate with strands no longer than ½", containing less than .5% dust.
 - (2) Stranded rubber aggregate shall be properly ground and graded to minus ¼ inch to a plus 30 mesh gradation, with specific gravity of $1.15 \pm .2$.
 - (3) No chunk or EPDM rubber will be allowed for Base Bid Synthetic Surfacing System.
5. Binder/Primer:
 - a. Carboxylated butadiene latex binder shall contain a minimum of 50% solids. Dilute per manufacturer's recommendations, not to exceed 30% by volume.
 - b. Latex to be delivered in transport tanker designed specifically for this purpose.
 - c. No asphalt emulsions will be allowed.
 - d. Latex binder shall meet the following minimum standards:
 1. Polymer type: Carboxylated Styrene Butadiene
 2. Total Solids: 50%

- 3. PH: 9.0
- 4. Viscosity: 200 cps
- 5. Wt./ gallon: 8.35 lbs.
- 6. Particle Charge: Anionic
- 7. Residual Monomer: .07% max.
- 8. Tg Value: -7C

3. Aqueous Dispersion Colorant:

- a. To be used for every spray application of the installation process, except for the primer application.
- b. Color shall be black.
- c. Colorant to be added at a rate approved by the manufacturer and adequately mixed to assure proper suspension.
- d. Colorant shall contain no lead and shall be USDA approved.
- e. Colorant shall enhance resistance of synthetic surfacing system to ultraviolet light, ozone damage and oxidation.
- f. Colorant shall meet the following minimum standards:
 - 1. Strength: = 5% by weight
 - 2. Grind Hegman: 6 minimum
 - 3. PH: 8.0 to 8.5
 - 4. Viscosity: 80-100 Kus
 - 5. Antioxidant: yes
 - 6. Freeze-Thaw Stability: Stable at -10C

- 4. Line Marking Paint: Shall be 100% acrylic latex type, unless different type is recommended by surfacing manufacturer. The use of traffic, oil, alkyd, or solvent-vehicle type paints is prohibited.

PART 3: EXECUTION

3.01 General

- 1. Inspect condition of new asphalt pavement and inform Owner/Architect/Paving Contractor of acceptability of new asphalt surface prior to commencement of final surfacing/stripping work.
- 2. Before the surfacing is applied, the running track and field events surface shall be cleaned of dirt and debris. Prepare surface by applying primer as required by manufacturer.
- 3. Strictly adhere to manufacturer's written instructions for mixing, transporting, spreading, and finishing resilient material.
- 4. Utilize only installation equipment and procedures that are recommended by surfacing manufacturer.
- 5. Do not allow any sort of traffic on new track surface until installation is complete, cured/dried and accepted.
- 6. Construction involving track materials shall not be conducted during a rainfall, or when rainfall is imminent. Both ambient and materials temperatures are to be at least 50 degrees F. (10 degrees C.) and rising.
- 7. After a rainfall, sufficient time shall be given to allow the surface to dry before resuming work. Surface shall be dry, as well as clean, since moisture on the surface on hot days can turn to steam or vapor. If moisture is trapped under an application of material, blisters may occur.

8. Note that surfacing/stripping work is to be complete no later than August 21, 2015.

3.02 Application of Product

1. Latex binder shall be placed in a mixer equipped with a pump and spray system capable of producing ten to forty pounds per square inch pressure.
2. Stranded base rubber aggregate shall be applied over the entire surface to receive synthetic surfacing at approximately 1 lb. Per square yard coverage.
3. Rubber aggregate shall be sprayed with latex composition with dilution rate at no more than 40% with additives formulated by synthetic surfacing system manufacturer at approximately .1 gallons per square yard.
4. When dry, successive applications of base rubber aggregate at approximately 1.35 lbs per square yard shall be applied to each coat (6 applications of rubber aggregate shall be required). Latex application at approximately .2 gallons per square yard rate shall take place on each rubber coat. The base rubber surface shall receive an application of surface rubber aggregate according to specifications by the synthetic surfacing manufacturer to achieve the desired texture and spike protection.
5. Each successive layer of rubber aggregate shall be raked by hand to provide consistent depth, eliminate air pockets and provide uniform appearance.
6. A final latex spray with UV protection additive shall be applied over the entire new synthetic surface.

3.03 Painting of Track and Field Events

1. Prepare synthetic surfaces as recommended by the manufacturer including curing and cleaning.
2. Paint Application: Each line shall be painted 2 coats of paint by a high-pressure spray method. Only inspected and approved coats of paint will be considered in determining the number of coats applied. Striping shall be carefully completed so lines are uniformly applied, straight, and with even edges.
3. Marking Requirements: The track shall be marked into 42 inch lanes as shown. The lane width shall include one 2 inch wide stripe. Other markings perpendicular to the lane lines shall be provided as follows:
 - a. Track markings: Show starting and finish lines for all races, off turn line (completely across track), exchange zone lines, relay running circles, hurdle lines, lane numbers (1 through 8, 36 inches high numbers), and all even and stripe designations.
 1. All event markings shall be clearly identified in lane two.
 2. Measurements shall be made on the track to the nearest 1/100th of a foot.
 3. Angles for event markings shall be set by using a theodolite capable of reading direct to 20 seconds.
 4. Marking on the curves by chord length method will not be allowed.
 - b. Long Jump Runway
 1. Provide 8 inches wide girls scratch line 6 feet from pit (each end).
 2. Eight inches wide one triple jump scratch line, 32 feet from pit (each end).

4. Color: Stripe colors shall define each separate zone as approved by the Owner. Colors shall be as shown on the drawings or as selected by the Owner.
5. Drawings: The Contractor shall prepare his own detailed layout, complete with color samples, and submit same for approval by the Architect and Owner prior to starting any painting. Synthetic Surfacing Contractor shall perform all striping / masking work with his own personnel.
6. Final Inspection: Upon completion of this portion of the Work, visually inspect surfaces and remove all paint and traces of paint from surfaces not scheduled to be painted.

3.04 Field Quality Control

The finished track surface shall be tested for compliance with the above specifications upon completion of the work. Testing shall occur utilizing "Floortest FT3" as recommended by the United States Tennis Court and Track Builders Association. Submit 3 copies of test results to Owner.

--END--

SECTION 2860
EQUIPMENT AND STRUCTURES

PART 1: GENERAL

1.01 Related Documents

1. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.
2. Refer to Section 1100 for Alternatives that may affect the Work of this Section.
3. Refer to Section 3000 for Concrete.

1.02 Summary

1. Provide labor, materials, and equipment necessary to furnish equipment and structures as shown on the Drawings and specified herein. Work under this Section includes, but is not limited to, the following:
 - a. Monuments
 - b. Long jump pits with concrete curbing (Add Alternate Bid GC-2)
 - c. Long jump take-off boards

Note: Refer to Drawings for location and quantities of items.

1.03 Submittals

1. Submit shop drawings for items included in this Section. Include types of materials, construction details, sizes and layout, and complete information on hardware and accessories.

PART 2: PRODUCTS

2.01 Acceptable Standards

1. Where the term "Acceptable Standard" is used within this Section, it refers to the manufacturer and product listed which is specified as the type, size, function, and quality required for this Project. Products of other manufacturers will be considered, providing their products of the type, size, function, and arrangement required.

2.02 Materials

1. Monuments: Shall be as detailed on the Drawings.
 - a. Provide monuments locating centers of track radii.
2. Long Jump Pits: Shall be as detailed on the Drawings. (2 required)
 - a. Pit Fill: Shall consist of 40 % clean sand and 60% sawdust.
 - b. Pit Base: Shall consist of 6 inches of No. 6 gravel.
 - c. Pit Frame: Shall be cast-in-place 6" w x 18" ht. reinforced concrete perimeter curbing.
3. Long Jump Take-off Boards (4 required)
 - a. Acceptable Standard: As manufactured by the Aluminum Athletic Equipment Co., West Conshohocken, Pennsylvania 19428.

- b. Materials and Construction: Shall be AAE #HTB-18 high school take-off boards made of select fir. Boards shall be 2 by 18 inches by 48 inches with five 2 inch subsurface cleats.
- 4. Materials and Construction: Shall be AAE Model SSVB cast aluminum vaulting boxes with flared sides and tilted end complying with recommendations of the AAU, The National High School Federation, and NCAA Rule 30. Provide AAE Model SSVC cover which can be covered with track material, fitting flush with track surface.
- 5. Long Jump Pit Frame (Alternate Bid #GC-2)
 - a. Provide cast-in place 6" w x 18" ht. reinforced concrete perimeter curbing for long-jump pits. Size, configuration, and locations of slabs shall be as indicated on approved shop drawings. Round exposed edges.
 - b. Concrete shall be 4,000 psi, air-entrained, formed, reinforced, placed, and finished per American Concrete Institute Standards for such work.
- 6. Concrete Encasements
 - a. Provide concrete encasement of existing iron rod track radii monuments. (Below surface of lawn)
 - b. Provide concrete consisting of Portland cement, complying with ASTM C150, aggregates complying with ASTM C33, and with a minimum of 28-day compressive strength of 4,000 psi, using at least 5 sacks of cement per cu.yd., 1 inch maximum size aggregate, maximum 3 inch slump, and 2% to 4 % entrained air. Prepare to conform to ASTM C94. Concrete shall be air-entrained 4% to 6%.

PART 3: EXECUTION

3.01 Installation

- 1. Monuments: Shall be properly installed to the required lines and grades, locating the exact points indicated on the Drawings.
- 2. Long Jump Pits: Shall be constructed and filled as indicated on the details and located as shown on the Drawings.
- 3. Long jump take-off boards and vaulting boxes shall be installed in accordance with manufacturer's printed instructions at the locations indicated on the Drawings.

--END--

SECTION 2930
LAWNS AND GRASSES

PART 1: GENERAL

1.01 Related Documents

1. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.
2. Scope of work includes lawn repair in conjunction with track reconstruction project, **especially in area where track width is extended.**

1.02 Summary

4. Unless specifically indicated otherwise, this Section includes furnishing of materials, equipment, and labor necessary for the installation of lawns and grass shown on the Drawings and including the following items:
 - a. Seeding of new or bare topsoil areas.
 - b. Repairing/seeding track infield areas disturbed by forming/pouring/paving operations around Long Jump areas.

1.03 Job Conditions

5. This subcontractor will be notified by the General Contractor when Work on this Project has progressed sufficiently to commence work of seeding. Thereafter, seeding operations shall be conducted under favorable weather conditions during the next season or seasons which are normal for such work as determined by accepted practice in the locality of the Project. At the option and on the full responsibility of the Contractor, seeding operations may be conducted under unseasonable conditions without additional compensation.

1.04 Warranty and Replacement

1. Warranty: Lawns shall be warranted for the minimum duration of one full year, to include one full growing season after seeding and sodding, and shall be alive and in satisfactory growth at the end of the warranty period.
2. The Architect will inspect the seeded areas within the one year warranty. Seeded areas requiring replacement during the warranty period shall be warranted one additional full year from the date of reseeding.
3. Owner's Responsibility: If an area of seeding or sodding during the warranty and replacement period is found to be damaged or destroyed due to vandalism, malicious mischief, vehicle ruts and tracks, or acts of God such as flooding, storm debris, then the Owner shall have the responsibility of replacing those lawn areas without cost or responsibility to the Contractor under this Section.

PART 2: PRODUCTS

2.01 Materials

1. Fertilizer: Commercial fertilizer shall be used for initial preparation and shall conform to the applicable state fertilizer laws. Organic lawn fertilizer shall be used for surface application after grass is up. Fertilizer shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the

original, unopened containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer which becomes caked or otherwise damaged, making it unsuitable for use, will not be acceptable.

2. Water: Water will be available at the project site. The Contractor shall furnish necessary hose, equipment, attachments, and accessories for the adequate irrigation of planted areas as may be required to complete the Work as specified.
3. Grass Seed: Shall be mixed and warranted by the dealer in accordance with the following:

<u>Common Name</u>	<u>Proportion by Weight</u>
Park Kentucky Bluegrass	15 percent
Rugby Kentucky Bluegrass	15 percent
Pennlawn Red Fescue	30 percent
Pennfinne Perennial Rye	20 percent
Delray Perennial Rye	20 percent

4. Mulch: Weyerhaeuser "Silva-Fiber" or equal, available from American Excelsior Corporation, Chicago, Illinois.

PART 3: EXECUTION

3.01 Soil Preparation for Seeding and Sodding

1. Seeding Contractor to examine finish grade for proper elevation and notify the Architect of any areas detrimental to successful development of a lawn. Do not proceed with Work until unsatisfactory conditions have been corrected and acceptable.
2. Two pounds of 15-20-10 formula commercial fertilizer per cu.yd. shall be thoroughly mixed with the existing topsoil or not less than 10 lbs. per 1000 sq. ft. of lawn surface, whichever is the greater.
3. The topsoil shall be disked repeatedly and tilled until the topsoil is thoroughly mixed.

3.02 Planting of Lawns

1. Sowing of Seed: Immediately before any seed is to be sown, the ground shall be scarified as necessary and shall be raked until the surface is smooth, friable, and of uniformly fine texture. Lawn areas shall be seeded evenly with a mechanical spreader at the rate of 8.0 lbs. to 1000 sq. ft. of area, lightly raked, rolled with a 200 lb. roller and watered with a fine spray. The method of seeding may be varied at the discretion of the Contractor to establish a smooth, uniform turf composed of the grasses specified. Reseeding shall be done in accordance with this procedure.
2. Mulch: Hydromulch seeded areas at the rate of 1800 lbs. per acre. Use Bowie hydromulcher or equal to apply mulch.

3.03 Clean Up

1. Material which has been brought onto track or paved areas by hauling operations or otherwise shall be removed promptly, keeping these areas clean.

Upon completion of the planting, excess debris, which has not been previously cleaned up, shall be removed from the site.

3.04 Maintenance of Lawn repair areas

1. Maintenance shall begin immediately following the last operation of installation for each portion of lawn and shall continue in accordance with the following requirements.
2. Seeded Lawns: Seeded lawns shall be protected and maintained by watering, mowing, and replacing for 30 days or as long as may be necessary to produce a uniform stand of grass. After grass is up, it shall be top dressed with organic lawn fertilizer. Maintenance shall continue until a uniform turf is established. For the purpose of establishing an acceptable standard, scattered bare spots, none of which is larger than one sq. ft., will be allowed up to a maximum of 3 percent of the lawn area. Areas not meeting this requirement will be reseeded.
3. New planting: New lawn planting shall be protected and maintained until the end of the lawn maintenance period. Maintenance shall include watering, weeding, cultivating, mulching, reseeding, and other necessary operations.
4. Provide labor and equipment for maintenance including the necessary watering and mowing equipment to meet the requirements herein established.
 - a. The Owner will furnish the water used by the Contractor to maintain the lawns as specified.

3.05 Observation for Acceptance

1. Observation of the Work of lawns to determine completion of contract work will be made by the Owner and Architect at the conclusion of the maintenance period, upon written notice requesting such observation submitted by the Contractor at least 10 days prior to the anticipated date. The condition of lawns will be noted and determination made by the Architect, in writing, whether maintenance shall continue.

--END--

SECTION 3000
CONCRETE FORMWORK/
REINFORCEMENT/CAST-IN-PLACE

I. CONCRETE FORMWORK

- A. Forms: EXT-DFPA, B-B Plyform, Class I & II. Use HD overlay for exposed surfaces. (Long Jump pit curbs)
- B. Form Oil: Non-staining type, shall not cause softening of concrete or impede wetting of surface to be cured, nor otherwise be deleterious.
- C. Forms shall be rigidly braced & tied together to maintain position & shape. Oil wood forms prior to use. Maintain forms during placing operation, so that concrete will be cast as intended by drawings.

II. CONCRETE REINFORCEMENT

A. Materials:

- 1. Bars: ASTM A615 or A616, Grade 40 and Grade 60.
- 2. Welded Wire Fabric: ASTM A-185.
- 3. Specials: Bar supports, ties, blocking, chairs, bolsters, spacers and other accessory items shall be provided as required to place all reinforcing steel as intended by the drawings, in accordance with ACI 315-65. Bricks, blocks, wood, earth mounds, or other inorganic material shall not be used for support of bars.

- B. Bars shall be wired securely in design positions as shown. Check position of bars prior to pouring.

- C. Concrete cover for reinforcing bars not shown in standard details or on Drawings shall conform to the min. requirements of ACI Code 318, latest edition. (Min. 2" cover in curbs).

III. CAST-IN-PLACE CONCRETE

- A. Standard Specifications, listed below, latest editions, shall govern concrete work of this project, and are made a part of this specification by reference.

- 1. Recommended Practice for Hot Weather Concreting (ACI-305)
- 2. Recommended Practice for Winter Concreting (ACI-306)
- 3. Building Code Requirements for Reinforcing Concrete (ACI-318)
- 4. Recommended Practice for Field Evaluation of Compressive Test Results of Field Concrete (ACI-214-65)

B. Materials:

- 1. Cement: Portland Cement conforming to ASTM C-150-71, Type I or Type III.
- 2. Aggregates: Fine & coarse aggregates conforming to ASTM C-33.
- 3. Grout: Non-shrink, premixed, requiring only addition of mixing water. "EMBECO", Master Builders.
- 4. Water: Clean and potable.
- 5. Waterstops: Similar to DUO-PVC, #6316-T by W. R. Meadows, Inc.

6. Curing, Sealing Compound: Transparent, synthetic rubber base solution (ASTM C-309), Type I equal to Sonneborne "Kur-N-Seal".

C. Admixtures:

1. Air-Entraining Agent: Neutralized vinsol resin solution, conforming to ASTM C-260-69. (Sonneborne "Aerolith" or approved equal).
2. Water Reducing Agent: ASTM C-494-71: Pozzoloth, a formulation that provides controlled setting and/or controlled rate of hardening without increase in water/cement ratio or loss in strength. (Pozzoloth by Master Builders or approved equal).

D. Mix Designs:

1. All concrete shall be homogeneous readily placeable & uniformly workable without segregation of materials.
2. Design Strength of Concrete:

<u>PART</u>	<u>STRENGTH</u>	<u>MAX. SLUMP</u>
a. Long Jump Pit Curb (Exterior)	4,000*	4" ± ½"

*Air Entrained

- E. Conveying: Concrete shall be placed carefully & rapidly to prevent segregation or loss of materials. Vertical drops of over three (3) feet shall be made by means of cylindrical, articulated type chutes or by other approved type equipment designed to prevent segregation.

F. Placing:

1. Concrete shall be placed as nearly as possible to its final position, at a rate such that it is at all times plastic & flows readily into the space between bars & in a manner which will produce horizontal layers of uniform thickness, convenient for compaction, and with smooth, dense surfaces.
2. Concrete partially hardened or contaminated with foreign material shall not be deposited, nor shall retempered concrete be used.

- G. Consolidation: All concrete shall be thoroughly consolidated with high frequency vibrators. Internal vibration shall be supplemented with hand spading & external form vibration as required producing solid concrete free from voids & honeycombing. Do not over vibrate. Excess free water collecting on the surface during vibration shall be removed as it appears. All patching shall be done soon after removal of forms.

- H. Before fresh concrete is placed against hardened concrete, clean & moisten hard surface with water.

I. Built-in-Work:

Subcontractors shall inform the General Contractor regarding openings, sleeves or chases required in the concrete work and provide all his items to be cast into the concrete pour. The General Contractor, prior to placing any concrete, shall give written notice to the Architect/Engineer and all Subcontractors of his intention to place concrete, and his schedule of placing.

J. Cold Weather Concreting: (ACI-306)

1. *Adequate* provisions shall be made for heating concrete materials & protecting the concrete in place when the atmospheric temperature is near or below freezing. Frozen materials containing ice shall not be used. Do not pour concrete on frozen ground.
2. *Whenever* the air temperature is below 40°F. the temperature of the fresh concrete when placed in the forms shall be between 60°F and 80°F. The Contractor shall have available a thermometer suitable for testing concrete temperatures.
3. Chemicals for prevention of freezing, such as calcium chloride are NOT permitted.

K. Hot Weather Concreting: (ACI-305)

1. Subbase shall be covered with 6-mil polyethylene sheet. Conveying Equipment shall be cool. Protect poured concrete with polyethylene sheet or sprayings.

L. Testing:

1. Compressive Strength Tests shall be made by an independent laboratory approved by the Architect. The cost of all tests and the removal, disposal replacement of any unsatisfactory concrete, including reinforcement shall be paid by this Contractor.
2. Test Cylinders shall be made for each 50 cu. yds. of concrete or fraction thereof, but not less than one set of cylinders for each day's pour. Only 1 set of tests shall be made from any one batch of concrete and all 4 cylinders shall be made from the same batch. Concrete for tests shall be taken from the forms after placing.
3. Compression Tests: Make 4 standard 6 x 12 cylinders and test in accordance with ASTM C-31. Test 2 cylinders at the age of 7 days and 2 cylinders at the age of 28 days. One 7-day cylinder and one 28-day cylinder shall be cured at the job site under the same conditions as the concrete used in the structure. The remaining cylinders shall be cured in the laboratory. Reports of cylinders test shall state: The location of the pour in the structure; laboratory or site curing; compression strength; type of fracture; age at testing; concrete supplier; mix specification strength & any other pertinent information, together with a statement as to whether this concrete complies with the specifications.

4. Slump Test shall be made in accordance with ASTM C-143 and reported with each compressive test. Provide a slump cone at the site at all times. (Slump shall not be less than 1 inch nor exceed 4 inches).
 5. Air content of fresh concrete shall be determined in accordance with ASTM C-231. Provide and maintain equipment for testing the air content of concrete at the site.
 6. Additional tests shall be made at the expense of the Contractor, if, in the opinion of the Architect, concrete of poor quality has been placed based on cylinder strengths below specification requirements or visual defects. Tests may be compression tests on cored cylinders, ASTM C-42, and/or load tests as outlined in ACI-318.
 7. Reports of all tests shall be furnished to the Architect & Gen. Contractor within 72 hours after completion of tests, identifying and interpreting the tests, and stating whether or not test specimens conform to all design requirements and specifically note any deviations.
- M. Finishing Flatwork: Curbs shall be screeded to a tolerance not to exceed 1/8" in ten feet (10'). Float surface to close all holes. Cut down high spots and fill low areas.
- N. Finishes:
1. Exterior:
-Long Jump Curb - Brush Finish
- O. Joints:
1. Control joints in curbs at max. 10'0" o.c. (less where shown on drawings). Use 1" deep slot. Use one-part urethane compound.
- P. Curing:
1. All concrete: shall be cured for at least five (5) days after placement by one of the approved methods below. During this period, no part of the concrete shall be permitted to become dry to prevent checking and cracking of the surface.
 2. Water Curing:
 3. Curing Compounds: shall be compatible with floor finish coat. Do not use below seamless poured flooring or ceramic tile.
- Q. Protection:
1. Fresh concrete shall be protected from heavy rains and mechanical injury, and from injurious action of the sun.
 2. Fresh concrete shall be kept wet by continuous sprinkling, ponding, or moisture retention covers
- R. Cleaning:
1. Clean new concrete curbs in strict accordance with manufacturer's requirements and recommendations.

- END -

